

Reason for report:

INITIATION

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## KYTHERA BIOPHARMACEUTICALS, INC.

### ATX-101: The Next Big Thing in Facial Aesthetics - Initiating at Outperform

• **Bottom Line:** We are initiating coverage of KYTH with an Outperform rating and a \$28/share valuation based on our DCF analysis. We recommend purchase of KYTH based on (1) compelling prospects for clinical and regulatory success in the US and Europe for a first-in-class product (ATX-101) for the treatment of submental (double chin) fat reduction, (2) evidence of strong physician demand for ATX-101 that supports US peak sales prospects of >\$500M and will capitalize on the rapidly growing facial aesthetics market, (3) a deep management team with experience across pharma/biotech and cosmetic dermatology, (4) tiered royalties and regulatory and commercial milestones from partner Bayer Dermatology on OUS sales of ATX-101, and (5) upside to our revenue estimates for off-label use or new ATX-101 indications in other areas of the body.

• **Injectable facial aesthetics market primed and ready for a new offering in ATX-101.** The current global facial aesthetics market, dominated by botulinum toxins and facial fillers, is ~\$2B and forecast to grow at an average rate of 10-12% through 2018. ATX-101, a novel injectable drug in development for treatment of submental fat (aka double chin), addresses a market with \$1B global annual sales potential.

• **We have extremely high conviction in US Ph III clinical & regulatory success.** KYTH has successfully completed Ph IIb US and Ph III EU studies with convincing efficacy and safety. We and MEDACorp regulatory and clinical KOLs believe KYTH's US Ph III studies are overpowered to deliver a positive outcome on the composite endpoint agreed upon with FDA. KOLs see no hurdles to FDA approval should the US studies replicate the Ph III EU results. Both studies are fully recruited with data likely in 3Q'13.

• **Our survey of 62 US MEDACorp cosmetic physician specialists suggests strong demand for ATX-101.** Among dermatologists and plastic surgeons polled, most expect to use it and over half will actively promote the procedure. On average, physicians predict rapid uptake among injectable-experienced patients with the expectation that ATX-101 will increase their overall patient volume with synergistic benefits on other injectable procedures. Finally, >40% of physicians surveyed expressed interest in using ATX-101 off-label. These results suggest our modeled peak sales forecast of >\$500M for treatment of submental fat reduction is achievable with potential upside from off-label use/new indications.



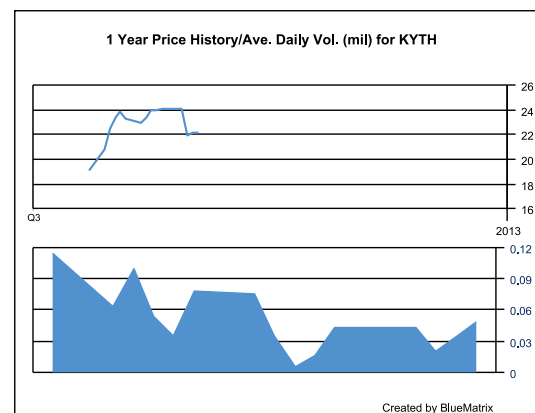
#### Key Stats:

(NASDAQ:KYTH)

<b>S&amp;P 600 Health Care Index:</b>	<b>795.76</b>
<b>Price:</b>	<b>\$22.11</b>
52 Week High:	\$25.30
52 Week Low:	\$16.00
Shares Outstanding (mil):	20.6
Market Capitalization (mil):	455.5
Book Value/Share:	0.00
Cash Per Share:	\$4.85
Dividend (ann):	\$0.00
Dividend Yield:	0.0%
Est LT EPS Growth:	10%
P/E to LT EPS Growth (FY13):	NM
Valuation:	\$28 based on DCF

*General: Est LT EPS Growth '17-'25*

*Shares Outstanding (mil): Note: EPS calculation includes dilutive effect of ~3M warrants, options, and performance shares outstanding.*



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2012E	0.0A	0.0A	0.0	0.0	0.0	(0.69)A	(1.02)A	(1.01)	(0.69)	(3.32)	NM
2013E	--	--	--	--	0.0	--	--	--	--	(2.46)	NM

Source: Company Information and Leerink Swann LLC Research



LEERINK SWANN



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# Initiating Coverage of Kythera (KYTH) with an Outperform Rating

**Rating: Outperform**

**Price as of 11/2: \$22.11**

**Market Cap: \$455M**

## **Investment thesis:**

**We are initiating coverage of Kythera with an Outperform rating.** We recommend purchase of KYTH based on (1) compelling prospects for clinical and regulatory success in the US and Europe for a first-in-class product (ATX-101) for the treatment of submental (double chin) fat reduction, (2) evidence of strong physician demand for ATX-101 that supports US peak sales prospects of >\$500M and will capitalize on the rapidly growing facial aesthetics market, (3) a deep management team with experience across pharma/biotech and cosmetic dermatology, (4) tiered royalties and regulatory and commercial milestones from partner Bayer Dermatology on OUS sales of ATX-101, (5) and upside to our revenue estimates for off-label use or new ATX-101 indications in other areas of the body. We believe these positive factors substantially outweigh the risks of (1) economic sensitivity of self-pay products, (2) regulatory risk, (3) a slower-than-expected launch of ATX-101 in North American and European markets, and (3) disappointing North American Phase III data for ATX-101. Our DCF valuation is \$28/share excluding any potential new indications or off label use outside of the initial indication for treatment of submental fat.

## **Valuation:**

We value KYTH shares at \$28/share based on our DCF valuation which calculates cash flows through 2025, applies a 12% discount rate and assume a 0% growth rate on the terminal value of KYTH cash flow in 2025.

## **Risks to Valuation:**

Key risks/uncertainties are: (1) economic sensitivity of self-pay products; (2) regulatory risk; (3) a slower-than-expected launch of ATX-101 in North American and European markets; and (3) disappointing North American Phase III data for ATX-101.



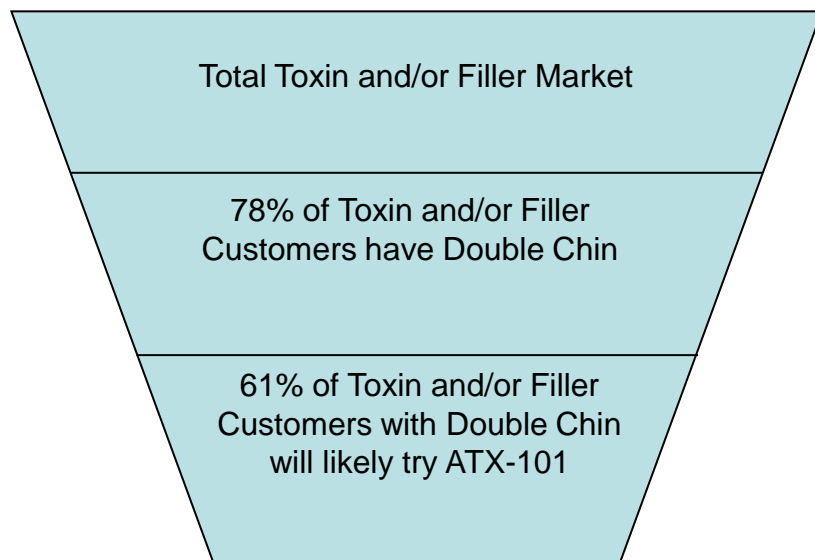
# ATX-101, a First-in-Class, Differentiated Late-Stage Product, is Poised to Capture Significant Share of the Global Facial Aesthetics Market

- **Kythera's first product candidate, ATX-101, is a first-in-class, injectable drug in Phase III clinical development for the reduction of submental (a.k.a. "double chin") fat.**
  - ATX-101 is a well characterized, proprietary synthetic formulation of sodium deoxycholate, a component of human bile that occurs in the body and promotes the breakdown of dietary fat. ATX-101 reduces fat locally while leaving surrounding tissue largely unaffected.
  - ATX-101 has intellectual property protection from 2025 to 2032.
  - Bayer Dermatology recently completed two pivotal Phase III trials of ATX-101 in Europe and positive top line results from these trials were reported in 2Q'12. Kythera initiated the pivotal Phase III clinical program, with planned enrollment of 1,000 patients, for ATX-101 in the United States and Canada in March 2012 and expects to report top line results from these trials in mid-2013.
- **Conversations with MEDACorp dermatology and plastic surgery Key Opinion Leaders (KOLs) indicate physicians are very interested in ATX-101 utilization on submental fat and other parts of the body.**
  - Kythera management expects to assess future potential treatment indications with ATX-101 in the body. We do not currently include estimates for ATX-101 for additional indications in our model.
- **ATX-101 allows Kythera to capitalize on the fast-growing global facial aesthetics market, which is poised to top \$5B in 2018.**
  - According to GlobalData forecasts, the worldwide market for facial aesthetics is forecast to reach ~\$5B by 2018 with a '11-'18E CAGR of 12% driven by non-invasive procedures such as facial injectables which provide patients with a lower cost option, shorter procedure times, improved comfort and faster visible outcomes.
  - Neither botulinum toxins (e.g., Allergan's Botox, Medcis's Dysport, Merz's Xeomin) or dermal fillers (e.g., Allergan's Juvederm, Medcis's Restylane, Merz's Belotero) can address patient complaints about double chin fat.
  - We forecast ATX-101 pricing of ~\$600 per procedure with 6 procedures recommended. We estimate that ATX-101 will account for 50% of the cost of each procedure. This is in line with pricing of dermal fillers and other minimally-invasive cosmetic procedures.
  - According to Kythera, a trained physician will be able to administer ATX-101 treatment in ~15-20 minutes, similar to the amount of time it takes for botulinum toxin and dermal filler injections.
- **The Bayer Dermatology partnership provides a platform for global ATX-101 sales and market expansion.**
  - Bayer's Dermatology unit, headquartered in Berlin, Germany, reported sales of ~\$400M in 2010 and employs over 700 people worldwide.
  - Kythera plans to commercialize the product using its own specialty sales force in the U.S. and Canada and will collect royalties on future sales of ATX-101 from Bayer Dermatology outside the U.S. and Canada.

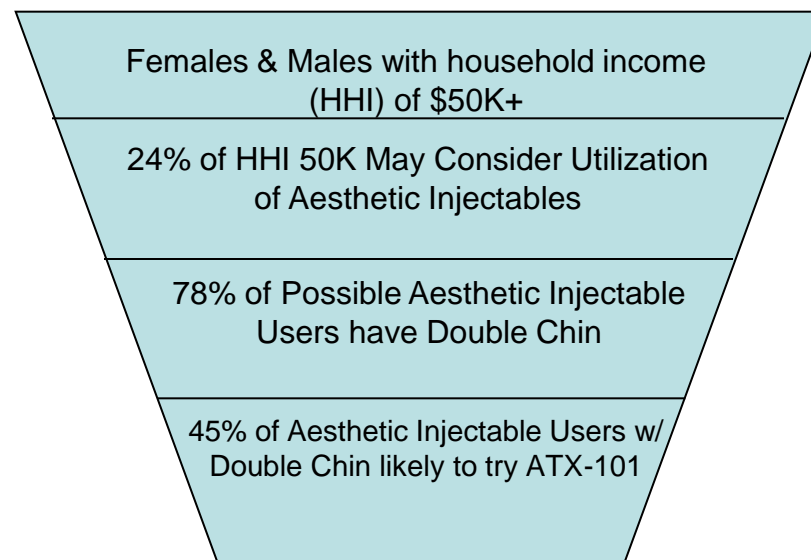


# Injectable Experienced vs Injectable Naïve Market Assumptions

## Injectable Experienced Population



## Injectable Naïve Population



	US	Europe
Total Toxin and/or Filler Market	1.9M	1.6M
HHI 50K Population	116M	130M
Injectable Experienced Population 5 yr CAGR	12.0%	12.0%
Population Growth	3.0%	3.0%





## Kythera U.S. Revenue Model Forecasts Peak ATX-101 Sales of >\$500M in Submental Fat Indication by '23E

- In the U.S., we assume regulatory approval and launch of ATX-101 in 2Q'15E. Our U.S. revenue estimates are \$12M in '15E growing to peak sales of \$519M in '23E.
- We assume that 78% of existing botulinum toxin or dermal filler patients have excess treatable submental fat and that 61% of these patients are likely to try ATX-101.
- We forecast an initial growth rate for the total injectable experienced market of 12% and forecast initial penetration of 2.2% in facial injectable-experienced U.S. patients in 2015E growing to 38% in 2023E.
- In the facial injectable-naïve U.S. population, we assume 24% of the population ages 20 to 65 earn \$50K per year in household income and 79% of this population would consider getting an aesthetic injectable. Of this 79%, we assume 45% have treatable submental fat and assume an initial growth rate for the total injectable naïve market of 1.5 - 2.5%.
- We assume 6 treatments per U.S. patient given clinical trial protocols with 75% persistence after Treatment 1, 65% persistence after Treatment 2, 55% persistence after Treatment 3, 50% persistence after Treatment 4, and 45% persistence after Treatment 5. These estimates are in line with our MEDACorp survey results.
- The cost per treatment is assumed to be \$300 and an annual price increase of 3% is forecast.

# Kythera U.S. Market Revenue Model – ATX-101 Injectable Experienced Patient Pool (Quarterly)

KYTHERA BIOPHARMACEUTICALS, INC.

November 5, 2012



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	Persistence	2012E	2013E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	1Q16E	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E
Total Toxin and/or Fillers Market		1,896	2,125	2,380	2,447	2,518	2,591	2,666	2,666	2,741	2,820	2,902	2,986	2,986	3,344	3,712
Toxin/Filler Consumers with Double Chin		1,479	1,658	1,857	1,909	1,964	2,021	2,080	2,080	2,138	2,200	2,263	2,329	2,329	2,609	2,896
ATX-101 Patient Pool (Injectable Experienced) in 000s		902	1,011	1,133	1,164	1,198	1,233	1,269	1,269	1,301	1,333	1,365	1,395	1,395	1,498	1,352
Growth Rate%					12.0%	12.0%	12.0%	12.0%		12.0%	12.0%	12.0%	12.0%			11.0%
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s		902	1,011	1,133	291	300	308	317	1,269	325	333	341	349	1,395	1,498	1,352
Growth Rate%			12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	11.7%	11.2%	10.7%	9.9%	9.9%	7.4%	-9.8%
ATX 101 Experienced (Out of Total Pool)														28	184	495
Penetration %		0.0%	0.0%	0.0%	0.0%	1.0%	3.0%	5.0%	2.2%	8.0%	10.0%	13.0%	15.0%	11.2%	20.8%	26.0%
Treatment 1		0	0	0	0	3	9	16	28	26	33	44	52	156	311	351
Persistence	75.0%	0	0	0	0	2	7	12	21	20	25	33	39	117	233	264
Treatment 2		0	0	0	0	0	2	7	9	12	20	25	33	90	202	233
Persistence	65.0%	0	0	0	0	0	1	5	6	8	13	16	22	58	132	152
Treatment 3		0	0	0	0	0	0	1	1	5	8	13	16	41	114	132
Persistence	55.0%	0	0	0	0	0	0	1	1	2	4	7	9	23	63	72
Treatment 4		0	0	0	0	0	0	0	0	1	2	4	7	15	52	63
Persistence	50.0%	0	0	0	0	0	0	0	0	0	1	2	3	7	26	31
Treatment 5			0	0	0	0	0	0	0	0	0	1	2	4	21	26
Persistence	45.0%		0	0	0	0	0	0	0	0	0	1	1	2	9	12
Treatment 6			0	0	0	0	0	0	0	0	0	0	1	1	7	9
ATX-101 Treatments (Inj. Exp.) in 000s		0	0	0	0	3	11	24	39	43	63	88	111	306	708	814
Growth Rate%				NM	NM	NM	NM	NM	NM	NM	2018.1%	663.1%	359.7%	689.5%	131.4%	15.1%

Source: Leerink Swann and Company Reports



# Kythera U.S. Market Revenue Model – ATX-101 Injectable Naïve Patient Pool (Quarterly)

KYTHERA BIOPHARMACEUTICALS, INC.

November 5, 2012



LEERINK SWANN

	2012E	2013E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	1Q16E	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E
HHI 50K Market	116,034	117,792	120,737	121,908	122,524	123,139	123,755	123,755	124,956	125,587	126,218	126,849	126,849	129,892	132,623
Consumer Aesthetic Injectable Considers	27,848	28,270	28,977	29,258	29,406	29,553	29,701	29,701	29,989	30,141	30,292	30,444	30,444	31,174	31,830
Consumers with Double Chin	22,000	22,333	22,892	23,114	23,230	23,347	23,464	23,464	23,692	23,811	23,931	24,051	24,051	24,628	25,145
ATX-101 Patient Pool (Injectable Naïve) in 000s	9,900	10,050	10,301	10,401	10,454	10,506	10,559	10,559	10,661	10,715	10,769	10,823	10,823	11,082	11,315
Growth Rate%				2.5%	2.5%	2.5%	2.5%		2.5%	2.5%	2.5%	2.5%			2.5%
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s	9,900	10,050	10,301	2,600	2,613	2,627	2,640	10,559	2,665	2,679	2,692	2,706	10,823	11,082	11,315
Growth Rate%		1.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.1%
ATX 101 Experienced (Out of Total Pool)													0	11	55
Penetration %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.4%	1.4%
Treatment 1		0	0	0	0	0	0	0	0	0	0	0	11	44	158
Persistence	75.0%	0	0	0	0	0	0	0	0	0	0	0	8	33	119
Treatment 2		0	0	0	0	0	0	0	0	0	0	0	0	33	33
Persistence	65.0%	0	0	0	0	0	0	0	0	0	0	0	0	21	21
Treatment 3		0	0	0	0	0	0	0	0	0	0	0	0	16	21
Persistence	55.0%	0	0	0	0	0	0	0	0	0	0	0	0	9	12
Treatment 4		0	0	0	0	0	0	0	0	0	0	0	0	6	9
Persistence	50.0%	0	0	0	0	0	0	0	0	0	0	0	0	3	4
Treatment 5		0	0	0	0	0	0	0	0	0	0	0	0	1	3
Persistence	40.0%	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Treatment 6			0	0	0	0	0	0	0	0	0	0	0	0	1
ATX-101 Treatments (Inj Naïve) in 000s	0	0	0	0	0	0	0	0	0	0	0	11	11	100	225
Growth Rate%			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	824.7%	124.9%

Source: Leerink Swann and Company Reports



# ATX-101 U.S. Market Revenue Model Summary (Quarterly)

	Persistence	2012E	2013E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	1Q16E	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s		902	1,011	1,133	291	300	308	317	1,269	325	333	341	349	1,395	1,498	1,352
Growth Rate%			12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	11.7%	11.2%	10.7%	9.9%	9.9%	7.4%	-9.8%
ATX 101 Experienced (Out of Total Pool)														28	184	495
<b>ATX-101 Treatments (Inj. Exp.) in 000s</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>24</b>	<b>39</b>	<b>43</b>	<b>63</b>	<b>88</b>	<b>111</b>	<b>306</b>	<b>708</b>	<b>814</b>
Growth Rate%				NM	NM	NM	NM	NM	NM	NM	2018.1%	663.1%	359.7%	689.5%	131.4%	15.1%

	2012E	2013E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	1Q16E	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s	9,900	10,050	10,301	2,600	2,613	2,627	2,640	10,559	2,665	2,679	2,692	2,706	10,823	11,082	11,315
Growth Rate%		1.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.1%
ATX 101 Experienced (Out of Total Pool)													0	11	55
<b>ATX-101 Treatments (Inj Naïve) in 000s</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>11</b>	<b>100</b>	<b>225</b>
Growth Rate%			NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	824.7%	124.9%

	2012E	2013E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	1Q16E	2Q16E	3Q16E	4Q16E	2016E	2017E	2018E
<b>Total Treatments in 000s</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>24</b>	<b>39</b>	<b>43</b>	<b>63</b>	<b>88</b>	<b>122</b>	<b>317</b>	<b>808</b>	<b>1,039</b>
Cost Per Treatment		0.0	300.0	309.0	309.0	309.0	309.0	309.0	318.3	318.3	318.3	318.3	318.3	327.8	337.7
Annual Price Increase		3.0%	3.0%					3.0%					3.0%	3.0%	3.0%
<b>Total Revenue in \$ MMs</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.9</b>	<b>\$3.6</b>	<b>\$7.5</b>	<b>\$12.0</b>	<b>\$13.8</b>	<b>\$20.2</b>	<b>\$27.9</b>	<b>\$38.9</b>	<b>\$100.8</b>	<b>\$264.8</b>	<b>\$351.0</b>
Growth Rate%										2081.7%	686.0%	419.4%	741.9%	162.7%	32.6%

Source: Leerink Swann and Company Reports

# KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012

## Kythera U.S. Market Revenue Model – ATX-101 Injectable Experienced Patient Pool (Annual)



LEERINK SWANN

	Persistence	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Total Toxin and/or Fillers Market		1,896	2,125	2,380	2,666	2,986	3,344	3,712	4,083	4,451	4,807	5,144	5,452	5,725	5,954
Toxin/Filler Consumers with Double Chin		1,479	1,658	1,857	2,080	2,329	2,609	2,896	3,185	3,472	3,750	4,012	4,253	4,465	4,644
ATX-101 Patient Pool (Injectable Experienced) in 000s		902	1,011	1,133	1,269	1,395	1,498	1,352	1,135	920	717	516	367	246	162
Growth Rate%								11.0%	10.0%	9.0%	8.0%	7.0%	6.0%	5.0%	4.0%
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s		902	1,011	1,133	1,269	1,395	1,498	1,352	1,135	920	717	516	367	246	162
Growth Rate%			12.1%	12.0%	12.0%	9.9%	7.4%	-9.8%	-16.0%	-19.0%	-22.0%	-28.0%	-29.0%	-33.0%	-34.0%
ATX 101 Experienced (Out of Total Pool)						28	184	495	847	1,165	1,441	1,692	1,872	2,012	2,105
Penetration %		0.0%	0.0%	0.0%	2.2%	11.2%	20.8%	26.0%	28.0%	30.0%	35.0%	35.0%	38.0%	38.0%	38.0%
Treatment 1		0	0	0	28	156	311	351	318	276	251	181	139	93	62
Persistence	75.0%	0	0	0	21	117	233	264	238	207	188	136	105	70	46
Treatment 2		0	0	0	9	90	202	233	264	238	207	188	136	105	70
Persistence	65.0%	0	0	0	6	58	132	152	171	155	134	122	88	68	46
Treatment 3		0	0	0	1	41	114	132	152	171	155	134	122	88	68
Persistence	55.0%	0	0	0	1	23	63	72	83	94	85	74	67	48	37
Treatment 4		0	0	0	0	15	52	63	72	83	94	85	74	67	48
Persistence	50.0%	0	0	0	0	7	26	31	36	42	47	43	37	34	24
Treatment 5			0	0	0	4	21	26	31	36	42	47	43	37	34
Persistence	45.0%		0	0	0	2	9	12	14	16	19	21	19	17	15
Treatment 6			0	0	0	1	7	9	12	14	16	19	21	19	17
ATX-101 Treatments (Inj. Exp.) in 000s		0	0	0	39	306	708	814	849	819	765	655	535	409	298
Growth Rate%				NM	NM	689.5%	131.4%	15.1%	4.2%	-3.4%	-6.6%	-14.4%	-18.3%	-23.5%	-27.1%

Source: Leerink Swann and Company Reports

# KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012

## Kythera U.S. Market Revenue Model – ATX-101 Injectable Naïve Patient Pool (Annual)



LEERINK SWANN

	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
HHI 50K Market	116,034	117,792	120,737	123,755	126,849	129,892	132,623	134,082	135,021	135,696	135,967	135,831	135,288	134,612
Consumer Aesthetic Injectable Considers	27,848	28,270	28,977	29,701	30,444	31,174	31,830	32,180	32,405	32,567	32,632	32,600	32,469	32,307
Consumers with Double Chin	22,000	22,333	22,892	23,464	24,051	24,628	25,145	25,422	25,600	25,728	25,779	25,754	25,651	25,522
ATX-101 Patient Pool (Injectable Naïve) in 000s	9,900	10,050	10,301	10,559	10,823	11,082	11,315	11,440	11,520	11,578	11,601	11,589	11,543	11,485
Growth Rate%							2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s	9,900	10,050	10,301	10,559	10,823	11,082	11,315	11,440	11,520	11,578	11,601	11,589	11,543	11,485
Growth Rate%		1.5%	2.5%	2.5%	2.5%	2.4%	2.1%	1.1%	0.7%	0.5%	0.2%	-0.1%	-0.4%	-0.5%
ATX 101 Experienced (Out of Total Pool)					0	11	55	213	419	650	916	1,217	1,554	1,900
Penetration %	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	1.4%	1.8%	2.0%	2.3%	2.6%	2.9%	3.0%	3.0%
Treatment 1 Persistence	75.0%	0	0	0	0	11	44	158	206	230	266	302	336	345
		0	0	0	0	8	33	119	154	173	200	226	252	258
Treatment 2 Persistence	65.0%	0	0	0	0	33	33	119	154	173	200	226	252	260
		0	0	0	0	21	21	77	100	112	130	147	164	169
Treatment 3 Persistence	55.0%	0	0	0	0	16	21	21	77	100	112	130	147	164
		0	0	0	0	9	12	12	42	55	62	71	81	90
Treatment 4 Persistence	50.0%	0	0	0	0	6	9	12	12	42	55	62	71	81
		0	0	0	0	3	4	6	6	21	28	31	36	40
Treatment 5 Persistence	40.0%	0	0	0	0	1	3	4	6	6	21	28	31	36
		0	0	0	0	1	1	2	2	2	8	11	12	14
Treatment 6		0	0	0	0	0	1	1	2	2	2	8	11	12
ATX-101 Treatments (Inj Naïve) in 000s	0	0	0	0	11	100	225	363	481	590	692	790	859	897
Growth Rate%			NM	NM	NM	824.7%	124.9%	61.5%	32.5%	22.6%	17.3%	14.1%	8.7%	4.5%

Source: Leerink Swann and Company Reports



# ATX-101 U.S. Market Revenue Model Summary (Annual)

	Persistence	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s		902	1,011	1,133	1,269	1,395	1,498	1,352	1,135	920	717	516	367	246	162
Growth Rate%			12.1%	12.0%	12.0%	9.9%	7.4%	-9.8%	-16.0%	-19.0%	-22.0%	-28.0%	-29.0%	-33.0%	-34.0%
ATX 101 Experienced (Out of Total Pool)						28	184	495	847	1,165	1,441	1,692	1,872	2,012	2,105
<b>ATX-101 Treatments (Inj. Exp.) in 000s</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>306</b>	<b>708</b>	<b>814</b>	<b>849</b>	<b>819</b>	<b>765</b>	<b>655</b>	<b>535</b>	<b>409</b>	<b>298</b>
Growth Rate%				NM	NM	689.5%	131.4%	15.1%	4.2%	-3.4%	-6.6%	-14.4%	-18.3%	-23.5%	-27.1%
		2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s		9,900	10,050	10,301	10,559	10,823	11,082	11,315	11,440	11,520	11,578	11,601	11,589	11,543	11,485
Growth Rate%			1.5%	2.5%	2.5%	2.5%	2.4%	2.1%	1.1%	0.7%	0.5%	0.2%	-0.1%	-0.4%	-0.5%
ATX 101 Experienced (Out of Total Pool)						0	11	55	213	419	650	916	1,217	1,554	1,900
<b>ATX-101 Treatments (Inj Naïve) in 000s</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>100</b>	<b>225</b>	<b>363</b>	<b>481</b>	<b>590</b>	<b>692</b>	<b>790</b>	<b>859</b>	<b>897</b>
Growth Rate%				NM	NM	NM	824.7%	124.9%	61.5%	32.5%	22.6%	17.3%	14.1%	8.7%	4.5%
		2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
<b>Total Treatments in 000s</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>317</b>	<b>808</b>	<b>1,039</b>	<b>1,212</b>	<b>1,301</b>	<b>1,355</b>	<b>1,347</b>	<b>1,325</b>	<b>1,268</b>	<b>1,195</b>
Cost Per Treatment			0.0	300.0	309.0	318.3	327.8	337.7	347.8	358.2	369.0	380.0	391.4	403.2	415.3
Annual Price Increase			3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<b>Total Revenue in \$ MM</b>		<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$12.0</b>	<b>\$100.8</b>	<b>\$264.8</b>	<b>\$351.0</b>	<b>\$421.5</b>	<b>\$466.0</b>	<b>\$500.1</b>	<b>\$511.9</b>	<b>\$518.7</b>	<b>\$511.3</b>	<b>\$496.4</b>
Growth Rate%						741.9%	162.7%	32.6%	20.1%	10.5%	7.3%	2.4%	1.3%	-1.4%	-2.9%

Source: Leerink Swann and Company Reports

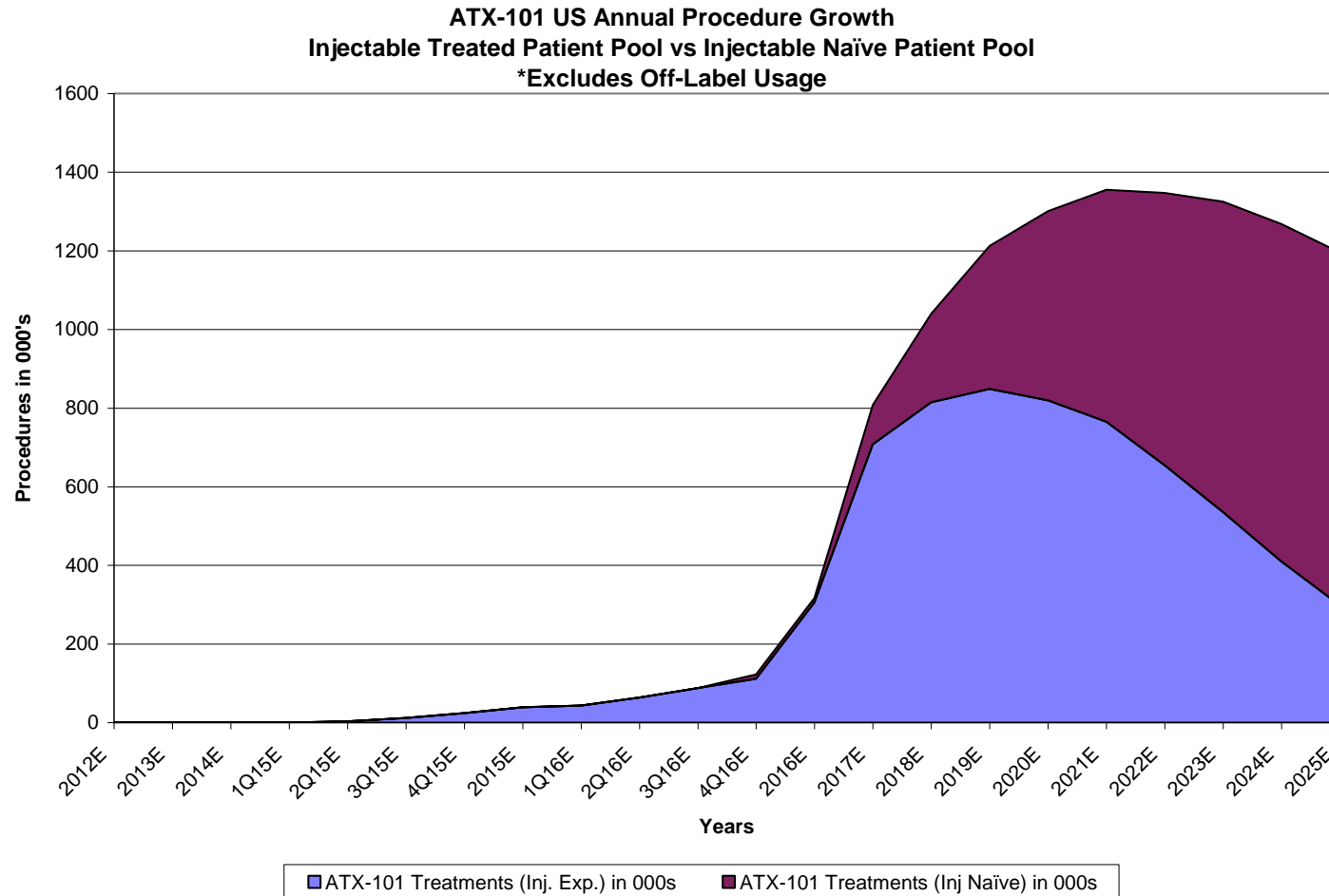
# ATX-101 Annual U.S. Procedure Growth – Injectable Naïve vs. Injectable Experienced

KYTERA BIOPHARMACEUTICALS, INC.

November 5, 2012



LEERINK SWANN



# Kythera European Revenue Model Assumes Peak Sales of ~\$300M in Submental Fat Indication by '20E with 11-12% Royalty



LEERINK SWANN



# KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012

## Kythera European Market Revenue Model – ATX-101 Injectable Experienced Patient Pool (Annual)



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	Persistence	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Total Toxin and/or Fillers Market		1,576	1,767	1,979	2,217	2,483	2,781	3,087	3,395	3,701	3,997	4,277	4,533	4,760	4,950
Toxin/Filler Consumers with Double Chin		1,230	1,378	1,544	1,729	1,937	2,169	2,408	2,648	2,887	3,118	3,336	3,536	3,713	3,861
ATX-101 Patient Pool (Injectable Experienced) in 000s		750	841	942	1,043	1,134	1,208	1,022	838	662	483	348	247	173	119
Growth Rate%								11.0%	10.0%	9.0%	8.0%	7.0%	6.0%	5.0%	4.0%
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s		750	841	942	1043	1134	1208	1022	838	662	483	348	247	173	119
Growth Rate%			12.1%	12.0%	10.8%	8.8%	6.5%	-15.4%	-18.0%	-21.0%	-27.0%	-28.0%	-29.0%	-30.0%	-31.0%
ATX 101 Experienced (Out of Total Pool)						101	308	627	913	1165	1396	1566	1687	1774	1834
Penetration %		0.0%	0.0%	2.4%	9.7%	18.3%	26.4%	28.0%	30.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Treatment 1		0	0	23	101	207	319	286	251	232	169	122	86	61	42
Persistence	75.0%	0	0	17	76	155	239	215	189	174	127	91	65	45	31
Treatment 2		0	0	8	59	134	223	239	215	189	174	127	91	65	45
Persistence	65.0%	0	0	5	39	87	145	156	139	123	113	82	59	42	30
Treatment 3		0	0	2	28	74	131	145	156	139	123	113	82	59	42
Persistence	55.0%	0	0	1	16	40	72	80	86	77	67	62	45	33	23
Treatment 4		0	0	0	10	33	64	72	80	86	77	67	62	45	33
ATX-101 Treatments (Inj. Exp.) in 000s			0	33	199	448	737	742	701	645	542	429	322	230	162
Growth Rate%				NM	500.8%	125.3%	64.6%	0.7%	-5.6%	-8.0%	-16.0%	-20.9%	-24.9%	-28.6%	-29.6%

Source: Leerink Swann and Company Reports

# KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012

## Kythera European Market Revenue Model – ATX-101 Injectable Naïve Patient Pool (Annual)



LEERINK SWANN

	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
HHI 50K Market	130,000	133,307	136,640	140,056	143,557	147,003	148,639	149,679	150,428	150,729	150,578	149,975	149,376	148,778
Consumer Aesthetic Injectable Considers	27,300	27,994	28,694	29,412	30,147	30,871	31,214	31,433	31,590	31,653	31,621	31,495	31,369	31,243
Consumers with Double Chin	15,015	15,397	15,782	16,176	16,581	16,979	17,168	17,288	17,374	17,409	17,392	17,322	17,253	17,184
ATX-101 Patient Pool (Injectable Naïve) in 000s	6,757	6,929	7,102	7,279	7,461	7,640	7,726	7,780	7,818	7,834	7,826	7,795	7,764	7,733
Growth Rate%		2.5%	2.5%	2.5%	2.5%	2.4%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s	6757	6929	7102	7279	7461	7640	7726	7780	7818	7834	7826	7795	7764	7733
Growth Rate%		2.5%	2.5%	2.5%	2.5%	2.4%	1.1%	0.7%	0.5%	0.2%	-0.1%	-0.4%	-0.4%	-0.4%
ATX 101 Experienced (Out of Total Pool)					0	30	136	275	430	610	814	1041	1267	1492
Penetration %	0.0%	0.0%	0.0%	0.0%	0.4%	1.4%	1.8%	2.0%	2.3%	2.6%	2.9%	2.9%	2.9%	2.9%
Treatment 1		0	0	0	30	106	139	156	180	204	227	226	225	224
Persistence	75.0%	0	0	0	22	79	104	117	135	153	170	170	169	168
Treatment 2		0	0	0	17	65	79	104	117	135	153	170	170	169
Persistence	65.0%	0	0	0	11	42	52	68	76	88	99	111	110	110
Treatment 3		0	0	0	7	33	42	52	68	76	88	99	111	110
Persistence	55.0%	0	0	0	4	18	23	28	37	42	48	55	61	61
Treatment 4		0	0	0	2	13	18	23	28	37	42	48	55	61
ATX-101 Treatments (Inj Naïve) in 000s		0	0	0	55	217	279	335	393	452	509	544	560	564
Growth Rate%			NM	NM	NM	292.4%	28.6%	20.0%	17.3%	15.0%	12.7%	6.8%	3.0%	0.8%

Source: Leerink Swann and Company Reports



# ATX 101- European Market Revenue Model Summary

Persistence	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
ATX-101 Quarterized Pts Pool (Inj. Exp.) in 000s	750	841	942	1043	1134	1208	1022	838	662	483	348	247	173	119
ATX 101 Experienced (Out of Total Pool)					101	308	627	913	1165	1396	1566	1687	1774	1834
<b>ATX-101 Treatments (Inj. Exp.) in 000s</b>		<b>0</b>	<b>33</b>	<b>199</b>	<b>448</b>	<b>737</b>	<b>742</b>	<b>701</b>	<b>645</b>	<b>542</b>	<b>429</b>	<b>322</b>	<b>230</b>	<b>162</b>
Growth Rate%			NM	500.8%	125.3%	64.6%	0.7%	-5.6%	-8.0%	-16.0%	-20.9%	-24.9%	-28.6%	-29.6%
	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
ATX-101 Quarterized Patient Pool (Inj Naïve) in 000s	6757	6929	7102	7279	7461	7640	7726	7780	7818	7834	7826	7795	7764	7733
Growth Rate%		2.5%	2.5%	2.5%	2.5%	2.4%	1.1%	0.7%	0.5%	0.2%	-0.1%	-0.4%	-0.4%	-0.4%
ATX 101 Experienced (Out of Total Pool)					0	30	136	275	430	610	814	1041	1267	1492
<b>ATX-101 Treatments (Inj Naïve) in 000s</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>217</b>	<b>279</b>	<b>335</b>	<b>393</b>	<b>452</b>	<b>509</b>	<b>544</b>	<b>560</b>	<b>564</b>
Growth Rate%			NM	NM	NM	292.4%	28.6%	20.0%	17.3%	15.0%	12.7%	6.8%	3.0%	0.8%
	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
<b>Total Treatments in 000s</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>199</b>	<b>503</b>	<b>954</b>	<b>1021</b>	<b>1036</b>	<b>1038</b>	<b>994</b>	<b>938</b>	<b>866</b>	<b>790</b>	<b>726</b>
Cost Per Treatment		0.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
Annual Price Increase		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total Revenue</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$9.9</b>	<b>\$59.6</b>	<b>\$150.9</b>	<b>\$286.2</b>	<b>\$306.4</b>	<b>\$310.8</b>	<b>\$311.4</b>	<b>\$298.1</b>	<b>\$281.4</b>	<b>\$259.8</b>	<b>\$237.0</b>	<b>\$217.8</b>
Royalty to Kythera			11.5%	11.5%	11.5%	11.8%	11.9%	11.9%	11.9%	11.8%	11.7%	11.6%	11.4%	11.2%
<b>Total Revenue to Kythera in \$ MMs</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$1.1</b>	<b>\$6.9</b>	<b>\$17.4</b>	<b>\$33.6</b>	<b>\$36.4</b>	<b>\$37.0</b>	<b>\$37.0</b>	<b>\$35.2</b>	<b>\$33.0</b>	<b>\$30.1</b>	<b>\$27.0</b>	<b>\$24.4</b>
Growth Rate%				500.8%	153.1%	93.8%	8.1%	1.6%	0.2%	-4.8%	-6.4%	-8.8%	-10.2%	-9.6%

Source: Leerink Swann and Company Reports

Tiered Royalty Sales Threshold	
250	12%
500	14%
Remainder	15%



# Kythera P&L Forecasts Full Year Profitability by 2017E with Peak Sales of \$549M and EPS of \$5.32/share in '23E

- **Total Sales:** We assume total revenue (ATX-101 U.S. and Canadian revenue plus ATX-101 Bayer Dermatology royalty revenue for Europe) of \$1.1M in '14E, \$18.8M in '15E, \$118.1M in '16E, growing to \$548.7M in '23E (peak sales year). Our '17E-'25E sales CAGR is 7%.
  - When ATX-101 is approved for commercial use in territories licensed to Bayer, we forecast escalating royalties of 11-12% based on Bayer's net product sales of ATX-101.
- **COGS:** Our COGS estimates in '14E and '15E are lower as we assume that Kythera has already expensed the material that it uses in those years for its commercially sold product. In '16E through '25E, we assume COGS in the 15.8% to 17.6% range.
- **R&D expense:** Our estimates for R&D expense of \$36-\$40M in '12E & '13E are the result of the Phase III clinical trial program costs for ATX-101. Post-approval in '14E, we assume R&D expense in the \$35M range growing to \$52M in '25E (10% of sales).
- **SG&A expense:** Our SG&A forecasts grow from \$11M in '12E to the \$40M-\$70M range post U.S. and Canadian approval in '15E-'16E as Kythera begins to build out its North American sales operations.
  - We assume Kythera will begin with 45 North American sales reps expanding the force by 20 reps every 6 months. Post '17E, we assume SG&A expense represents ~40% of sales decreasing to ~30% of sales by '25E.
- **Interest income:** We assume interest income of less than \$1M in '12E-'19E and \$1M-\$5M in '20E-'25E.
- **Tax rate:** We apply a 28% tax rate in '17E rising to 35% in '18-'25E.
- **Earnings per share:** Our model forecasts Kythera full year profitability in '17E with net income of \$67.8M and '17E EPS of \$2.37 on a diluted share count of 28.6M shares outstanding. Our '17E-'25E EPS CAGR is 10%.
  - Our EPS forecasts are \$3.63 in '18E, \$4.27 in '19E, \$4.67 in '20E, \$5.14 in '21E, \$5.29 in '22E, \$5.32 in '23E (peak), \$5.22 in '24E, and \$5.05 in '25E.
- Our model does not include sales from additional ATX-101 indications or other pipeline products.
- **Cash & Cash Equivalents:** Kythera has cash and equivalents of ~\$100M (pro forma as adjusted post IPO estimate) and no debt.
- **We expect Kythera to do a secondary raise in 1Q14 of 4MM shares or \$120M (~\$30/share) ahead of launch in the US**



# Kythera P&L: 2011A – 2018E (Quarterly)

(\$ in Millions, Except EPS)																
(Year Ended December 31)	2011	1Q12	2Q12	3Q12E	4Q12E	2012E	1Q13E	2Q13E	3Q13E	4Q13E	2013E	2014E	2015E	2016E	2017E	2018E
ATX-101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	100.8	264.8	351.0
ATX-101 Bayer Royalty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	6.9	17.4	33.6	36.4
<b>Total Revenue</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.1</b>	<b>18.8</b>	<b>118.1</b>	<b>298.4</b>	<b>387.3</b>
Sublicense Expense	1.2	0.2	1.8	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COGS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	18.6	49.0	64.9
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.0%	7.2%	15.8%	16.4%	16.8%
Gross Profit	(1.2)	(0.2)	(1.8)	0.0	0.0	(2.0)	0.0	0.0	0.0	0.0	0.0	1.1	17.5	99.5	249.4	322.4
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	84.2%	83.6%	83.2%
R&D	15.8	6.5	8.4	10.0	11.1	36.0	14.0	9.0	8.0	9.0	40.0	35.0	35.0	35.0	36.0	38.7
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	29.6%	12.0%	10.0%
SG&A	6.9	2.2	2.5	3.0	3.0	10.7	3.5	3.0	3.3	3.2	13.0	17.0	43.0	70.0	119.4	139.4
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	59.3%	40.0%	36.0%
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Operating Income</b>	<b>(23.8)</b>	<b>(8.9)</b>	<b>(12.6)</b>	<b>(13.0)</b>	<b>(14.2)</b>	<b>(48.6)</b>	<b>(17.5)</b>	<b>(12.0)</b>	<b>(11.3)</b>	<b>(12.2)</b>	<b>(53.0)</b>	<b>(50.9)</b>	<b>(60.5)</b>	<b>(5.5)</b>	<b>94.1</b>	<b>144.2</b>
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-4.7%	31.5%	37.2%
<b>Non-Operating Items</b>	<b>(0.3)</b>	<b>(0.0)</b>	<b>(0.6)</b>	<b>(0.1)</b>	<b>(0.1)</b>	<b>(0.7)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.2)</b>	<b>0.5</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>
Pre-tax Income	(24.1)	(8.9)	(13.2)	(13.1)	(14.3)	(49.4)	(17.5)	(12.0)	(11.2)	(12.2)	(53.0)	(51.1)	(60.0)	(5.2)	94.2	144.3
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-4.4%	31.6%	37.3%
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.0%	28.0%
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.4	40.4
<b>Net Income</b>	<b>(24.1)</b>	<b>(8.9)</b>	<b>(13.2)</b>	<b>(13.1)</b>	<b>(14.3)</b>	<b>(49.4)</b>	<b>(17.5)</b>	<b>(12.0)</b>	<b>(11.2)</b>	<b>(12.2)</b>	<b>(53.0)</b>	<b>(51.1)</b>	<b>(60.0)</b>	<b>(5.2)</b>	<b>67.8</b>	<b>103.9</b>
% of Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-4.4%	22.7%	26.8%
Average Shares Outstanding	11.1	12.9	12.9	13.0	20.6	14.9	21.6	21.6	21.6	21.6	21.6	25.6	26.6	27.6	28.6	28.6
<b>Operating EPS</b>	<b>(\$2.17)</b>	<b>(\$0.69)</b>	<b>(\$1.02)</b>	<b>(\$1.01)</b>	<b>(\$0.69)</b>	<b>(\$3.32)</b>	<b>(\$0.81)</b>	<b>(\$0.56)</b>	<b>(\$0.52)</b>	<b>(\$0.57)</b>	<b>(\$2.46)</b>	<b>(\$2.00)</b>	<b>(\$2.26)</b>	<b>(\$0.19)</b>	<b>\$2.37</b>	<b>\$3.63</b>

Source: Leerink Swann and Company Reports



# Kythera P&L: 2011A – 2025E (Annual)

(\$ in Millions, Except EPS)																
(Year Ended December 31)	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	CAGR 17-25
ATX-101	0.0	0.0	0.0	0.0	12.0	100.8	264.8	351.0	421.5	466.0	500.1	511.9	518.7	511.3	496.4	8%
ATX-101 Bayer Royalty	0.0	0.0	0.0	1.1	6.9	17.4	33.6	36.4	37.0	37.0	35.2	33.0	30.1	27.0	24.4	-4%
Total Revenue	0.0	0.0	0.0	1.1	18.8	118.1	298.4	387.3	458.5	503.0	535.3	544.9	548.7	538.3	520.8	7%
Sublicense Expense	1.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
COGS	0.0	0.0	0.0	0.0	1.4	18.6	49.0	64.9	78.0	86.2	92.5	94.7	96.0	94.6	91.8	8%
% of Sales	NM	NM	NM	0.0%	7.2%	15.8%	16.4%	16.8%	17.0%	17.1%	17.3%	17.4%	17.5%	17.6%	17.6%	1%
Gross Profit	(1.2)	(2.0)	0.0	1.1	17.5	99.5	249.4	322.4	380.5	416.8	442.8	450.2	452.8	443.7	429.0	7%
% of Sales	NM	NM	NM	NM	NM	84.2%	83.6%	83.2%	83.0%	82.9%	82.7%	82.6%	82.5%	82.4%	82.4%	0%
R&D	15.8	36.0	40.0	35.0	35.0	35.0	36.0	38.7	45.8	50.3	53.5	54.5	54.9	53.8	52.1	5%
% of Sales	NM	NM	NM	NM	NM	29.6%	12.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	-2%
SG&A	6.9	10.7	13.0	17.0	43.0	70.0	119.4	139.4	146.7	161.0	163.3	163.5	164.6	161.5	156.2	3%
% of Sales	NM	NM	NM	NM	NM	59.3%	40.0%	36.0%	32.0%	32.0%	30.5%	30.0%	30.0%	30.0%	30.0%	-4%
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
Operating Income	(23.8)	(48.6)	(53.0)	(50.9)	(60.5)	(5.5)	94.1	144.2	187.9	205.5	226.0	232.3	233.3	228.4	220.6	11%
% of Sales	NM	NM	NM	NM	NM	-4.7%	31.5%	37.2%	41.0%	40.9%	42.2%	42.6%	42.5%	42.4%	42.4%	4%
Non-Operating Items	(0.3)	(0.7)	0.0	(0.2)	0.5	0.3	0.1	0.1	0.4	0.9	1.5	2.1	2.9	3.6	4.4	NM
Pre-tax Income	(24.1)	(49.4)	(53.0)	(51.1)	(60.0)	(5.2)	94.2	144.3	188.4	206.4	227.5	234.4	236.2	232.0	225.0	12%
% of Sales	NM	NM	NM	NM	NM	-4.4%	31.6%	37.3%	41.1%	41.0%	42.5%	43.0%	43.0%	43.1%	43.2%	4%
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.0%	28.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	3%
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	26.4	40.4	65.9	72.2	79.6	82.0	82.7	81.2	78.8	15%
Net Income	(24.1)	(49.4)	(53.0)	(51.1)	(60.0)	(5.2)	67.8	103.9	122.4	134.2	147.9	152.3	153.5	150.8	146.3	10%
% of Sales	NM	NM	NM	NM	NM	-4.4%	22.7%	26.8%	26.7%	26.7%	27.6%	28.0%	28.0%	28.0%	28.1%	3%
Average Shares Outstanding	11.1	14.9	21.6	25.6	26.6	27.6	28.6	28.6	28.7	28.7	28.8	28.8	28.9	28.9	29.0	0%
Operating EPS	(\$2.17)	(\$3.32)	(\$2.46)	(\$2.00)	(\$2.26)	(\$0.19)	\$2.37	\$3.63	\$4.27	\$4.67	\$5.14	\$5.29	\$5.32	\$5.22	\$5.05	10%

Source: Leerink Swann and Company Reports



# Kythera Upcoming Catalysts

Date	Event	Comments
Year end '12	U.S. clinical trial enrollment completion	Kythera expects to complete enrollment of the 1,000 patient U.S. clinical trials by year end '12
1H'13E	EU regulatory submission - ATX-101	Bayer is expected to submit ATX-101 to EU regulatory authorities in 1H'13
Mid '13	Clinical trial results - U.S. Phase III trials of ATX-101	Kythera expects top-line U.S. Phase III trial results to be available by mid '13
Early '14E	U.S. regulatory submission - ATX-101	We estimate Kythera will submit regulatory filings in the U.S. in early 2014
1H'14E	European launch of ATX-101	We forecast Bayer to launch ATX-101 in Europe beginning in 1H'14
1H'15E	U.S. launch of ATX-101	We forecast Kythera to launch ATX-101 in the U.S. in 1H'15

Source: Company information, Leerink Swann LLC research





## Positive U.S. Phase IIb Data Reported After FDA Discussions Resulting in Rigorous Submental Fat Assessment Endpoints

Endpoint	Measure (all vs. placebo)	U.S. Phase IIb (up to 6 Tx, @ 28 days)	
		1mg/cm <sup>2</sup> (n=40)	2mg/cm <sup>2</sup> (n=42)
CR-SMFRS	mean Δ	p=0.052	p=0.003
	% of patients with ≥ 1 pt improvement	p=0.016	p=0.003
	% of patients with ≥ 2 pt improvement	NS	NS
PF-SMFRS	mean Δ	NS	p<0.001
	% of patients with ≥ 1 pt improvement	NS	p=0.022
	% of patients with ≥ 2 pt improvement	NS	p=0.011
SSRS	% of patients ≥ 4	p=0.005	p<0.001
PR-SMFIS (each measure*)	mean Δ	p<0.05*	p≤0.001
MRI Volume	mean Δ	p<0.05	p=0.006
Global Post-Tx Satisfaction	% of patients ≥ 4	p<0.001	p<0.001

Notes: CR-SMFRS=Clinician-Reported Submental Fat Rating Scale

PR-SMFRS=Patient-Reported Submental Fat Rating Scale

SSRS=Subject-Self Rating Scale

PR-SMFIS=Patient-Reported Submental Fat Impact Scale

Tx=Treatment, Δ=change

NS=not statistically significant (p>0.05)

\*=except "Self-Conscious" and "Overweight" measures NS, overall score: p=0.005

For secondary measures of PR-SMFRS, PR-SMFIS, MRI Volume &

Global Post-Tx Satisfaction, analysis includes only subjects with available data

Source: Kythera S-1 filing

- The U.S.-based Phase IIb trial in 129 patients was developed by Kythera and the FDA after two initial Phase IIa trials were conducted in Europe in a total of 155 patients.
- FDA discussions led to the addition of submental fat measurement tools to the U.S. Phase II trial including the patient-reported fat rating and impact scales along with the clinician-reported fat rating scale which was used in the European Phase IIa trials. MRI assessments were also used.
- The exact number of injections used in each patient was at the discretion of the physician depending on distribution of submental fat similar to the Phase IIa trials.
- Patients were allowed to receive up to six treatments at 28-day intervals vs. up to four treatments at 28-day intervals in the Phase IIa studies.
- Phase IIb results indicated that both the 1mg/cm<sup>2</sup> and the 2mg/cm<sup>2</sup> doses were superior to placebo on most measures, and the higher dose appeared to consistently outperform the lower dose.
- Compared to placebo-treated patients, dose-related improvements were observed in ATX-101-treated patients for mean changes in CR-SMFRS ratings, mean changes in PR-SMFRS ratings and mean changes in submental fat volume as assessed using MRI. Plus, treatment with ATX-101 resulted in improvements in patients' self-perception related to their submental fat as measured by the PR-SMFIS.
- Treated patients reported statistically significant increases in happiness with appearance of "chin fat", self-perceptions of youthfulness, looking less overweight. The patients also reported feeling significantly less embarrassed, bothered and self-conscious about "chin fat" appearance.
- ATX-101 was well-tolerated and the safety profile is characterized by transient, mild to moderate local injection site reactions. Pain was the most common injection site reaction followed by numbness and bruising.



# European Phase III Trials of ATX-101 Achieved Statistically Significant Results on Primary and Secondary Endpoints

## Trial Design

- Identical, pivotal, multi-center, randomized, double-blind, placebo-controlled trials
- Assessing efficacy, safety and tolerability, dosed at 1 or 2 mg/cm<sup>2</sup> vs. placebo
- Up to 4 treatments at 28-Day intervals
- Enrolled 723 patients in 57 centers
- Primary assessment performed 12 weeks after last treatment

## Primary Endpoints

- Statistically significant results on:
  - Clinician-Reported Submental Fat Rating Scale (CR-SMFRS)
  - Subject Self Rating Scale (SSRS)

## Secondary And Other Endpoints

- Statistically significant results on:
  - Patient-Reported Submental Fat Rating Scale (PR-SMFRS)
  - Patient-Reported Submental Fat Impact Scale (PR-SMFIS)
  - Post treatment patient satisfaction

## Objective Endpoint

- Statistically significant results on caliper

# European Phase III Results Showed ATX-101 Demonstrated Robust Efficacy on Patient and Clinician Reported Fat Rating Scales



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			Study 16		Study 17	
			1 mg/cm <sup>2</sup>	2 mg/cm <sup>2</sup>	1 mg/cm <sup>2</sup>	2 mg/cm <sup>2</sup>
Primary endpoints	<b>CR-SMFRS</b>	Proportion of patients ≥ 1 point change	P<0.001	P<0.001	P<0.001	P<0.001
	<b>SSRS</b>	Proportion of patients ≥ Category 4	P<0.001	P<0.001	P<0.001	P<0.001
Secondary endpoints	<b>CR-SMFRS</b>	Mean change	P<0.0001	P<0.0001	P<0.0001	P<0.0001
	<b>PR-SMFRS</b>	Mean change	P<0.0001	P<0.0001	P<0.0001	P<0.0001
	<b>PR-SMFIS</b>	Mean change	P≤0.01	P<0.0001	P≤0.0001	P<0.001
	<b>Global Satisfaction Score</b>	Proportion of Patients Satisfied	P<0.0001	P<0.0001	P=0.0001	P=0.0001
Other	<b>Caliper</b>	Mean change	P<0.001	P<0.001	NS	P=0.040

\*NS" signifies not statistically significant (p>0.05)

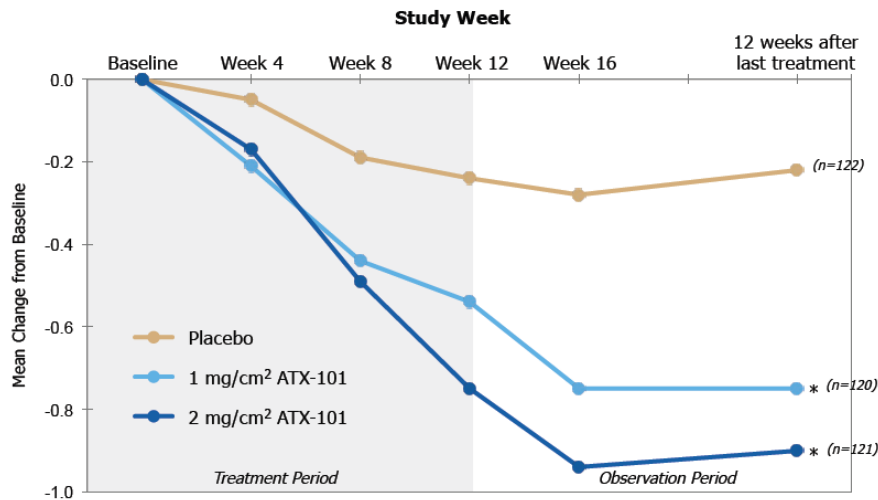
Source: Kythera Corporate Presentation

# European Phase III Trials Show Curves Begin to Separate from Placebo Immediately and Response is Maintained 12 Weeks After the Last Treatment



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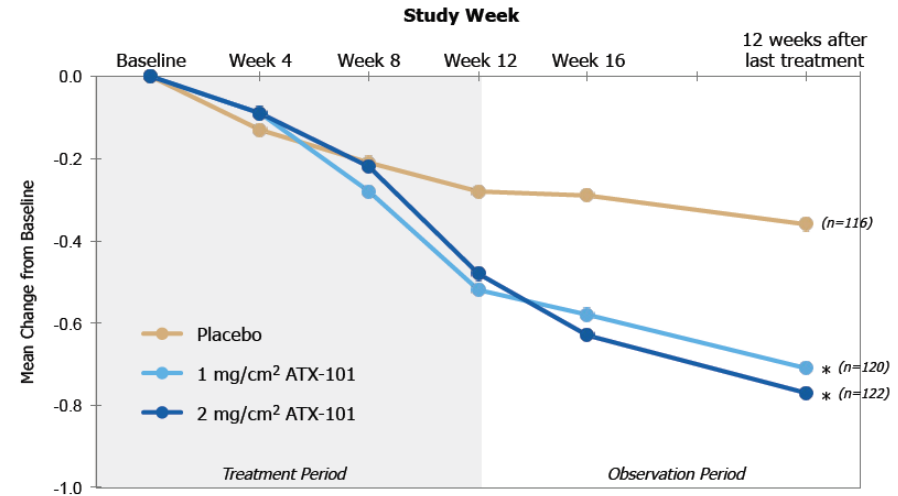
## Study 16: Clinician-Reported Submental Fat Rating Scale



\*  $p < 0.001$  ATX-101 vs. placebo

Source: Kythera Corporate Presentation

## Study 17: Clinician-Reported Submental Fat Rating Scale



\*  $p < 0.001$  ATX-101 vs. placebo

Source: Kythera Corporate Presentation

# European Phase III Trials Demonstrate that ATX-101 Has an Excellent Safety Profile; Most Common AE's Limited to Injection Site and Transient



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<b>Event</b>	<b>Placebo (%)</b>		<b>ATX-101: 1 mg/cm<sup>2</sup> (%)</b>		<b>ATX-101: 2 mg/cm<sup>2</sup> (%)</b>	
	<b>Study 16</b>	<b>Study 17</b>	<b>Study 16</b>	<b>Study 17</b>	<b>Study 16</b>	<b>Study 17</b>
<i>Pain/Burning</i>	25.4	28.9	77.3	89.0	79.3	88.5
<i>Swelling</i>	30.3	21.9	65.5	55.9	66.1	54.9
<i>Numbness</i>	2.5	1.8	46.2	40.7	50.4	50.0
<i>Erythema</i>	23.0	21.9	38.7	42.4	37.2	43.4
<i>Induration</i>	3.3	0.9	18.5	15.3	27.3	19.7
<i>Bruising</i>	41.0	50.0	55.5	60.2	53.7	54.9
<i>Pruritus</i>	0.8	1.8	9.2	9.3	2.5	7.4
<i>Paresthesia</i>	1.6	0.0	4.2	7.6	4.1	9.8
<i>Nodule</i>	0.0	0.0	2.5	0.8	7.4	7.4

Source: Kythera Corporate Presentation



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## Patient Photographs from the European Phase III Trial Highlight ATX-101's Visible Efficacy Over 24 Weeks



36-year old female entered Ph III with baseline submental fat rated as grade 2 (moderate) on both the clinician-rated scale (CR-SMFRS) and the patient-rated scale (PR-SMFRS).

By the end of the study (wk 24), she achieved a 1-grade reduction in submental fat according to the CR-SMFRS, a 2-grade reduction according to PR-SMFRS, and a 3-point improvement in satisfaction with appearance (SSRS).

ATX-101 can be administered by a trained physician within a 10-15 minute window. A grid containing 40 injection site openings is placed underneath the patient's chin, and injections are given to the patient within the grid pattern.





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## Additional Evidence of Reduction of Double Chin with ATX-101 from European Phase III Trial Results



42-year old female entered Ph III with baseline submental fat rated as grade 2 (moderate) on both the clinician-rated scale (CR-SMFRS) and the patient-rated scale (PR-SMFRS).

By the end of the study (wk 24), she achieved a 1-grade reduction in submental fat according to the CR-SMFRS and PR-SMFRS, and a 2-point improvement in satisfaction with appearance (SSRS).

Results from these trials, which were presented in 2Q'12, are anticipated to provide the basis of Bayer's regulatory submissions in the EU in 1H'13E. Bayer has also initiated a 2 year, non-treatment, follow-up trial on a subset of patients from the European Phase III trials to assess long-term safety and duration of treatment effects.





# REFINE-1 & 2, U.S. Pivotal Phase III Trials, Ongoing; Trial Design is Modestly Different vs. European Phase III Trials

<b>Trial Design</b>	<ul style="list-style-type: none"><li>• Identical, pivotal, multi-center, randomized, double-blind, placebo-controlled trials</li><li>• Assessing efficacy, safety and tolerability, dosed at 2 mg/cm<sup>2</sup> vs. placebo</li><li>• Up to 6 treatments at 28-Day intervals</li><li>• Primary assessment performed 12 weeks after last treatment</li><li>• Initiated March 2012, 70+ centers U.S. and Canada, plan to enroll ~1,000 patients</li></ul>
<b>Primary Endpoints</b>	<ul style="list-style-type: none"><li>• Co-Primary endpoints will be measured as:<ul style="list-style-type: none"><li>– 1-Grade change in the CR-SMFRS / PR-SMFRS composite</li><li>– 2-Grade change in the CR-SMFRS / PR-SMFRS composite</li></ul></li></ul>
<b>Secondary And Other Endpoints</b>	<ul style="list-style-type: none"><li>• Will measure improvement in the Patient-Reported Submental Fat Impact Scale (PR-SMFIS)</li></ul>
<b>Objective Endpoint</b>	<ul style="list-style-type: none"><li>• Will measure the reduction in volume of submental fat using MRI in approximately 400 patients</li></ul>
<b>Safety</b>	<ul style="list-style-type: none"><li>• Will assess adverse events</li></ul>

Source: Kythera Corporate Presentation

# Regulatory Endpoints for U.S. Pivotal Phase III Trials are Composite Endpoints; Patient Reported Satisfaction with Appearance is Not a Primary Endpoint in the U.S. Trials



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Primary Regulatory Endpoints	What Measured	Scale	How Used
<b>Europe</b>  (Co-Primary Endpoints)	Clinician Reported	Submental Fat (5 pt. Scale)	CR-SMFRS
	Patient Reported	Satisfaction with Appearance of Face and Chin (7 pt. Scale)	SSRS
<b>U.S. and Canada</b>  (Co-Primary Endpoints)	Clinician Reported	Submental Fat (5 pt. Scale)	CR-SMFRS
	Patient Reported	Submental Fat (5 pt. Scale)	PR-SMFRS

Source: Kythera Corporate Presentation



## High Likelihood that U.S. Phase III Trials Succeed Based on Phase IIb Data and Post-Hoc Analysis of European Phase III Results

- **A post hoc analysis of the combined European Phase III trials demonstrated statistically significant reduction vs. placebo of moderate to severe submental fat using U.S. composite endpoints.**
  - From this analysis, the 2mg/cm<sup>2</sup> arm met the co-primary, composite endpoints being used in the U.S. Phase III trials by demonstrating statistically significant reduction vs. placebo of moderate to severe submental fat, as measured by the CR-SMFRS/PR-SMFRS composite at pre-defined thresholds.
  - ATX-101 demonstrated a composite 1-grade improvement (49.0% vs. 15.5%,  $p < 0.001$ ), and a composite 2-grade improvement (7.5% vs. 0.4%,  $p < 0.001$ ).
- **Since response rates in the Phase IIb trial were robust, Kythera made no adjustments to the U.S. Phase III clinical trial program.**
  - Response rates observed in the Phase IIb study, where patients received up to six treatments, were a composite 1-grade improvement (57.1% vs. 22.2%,  $p < 0.001$ ), and a composite 2-grade improvement (9.5% vs. 2.2%, not significant).

Given the post hoc analysis of the combined European Phase III data, the response rates observed in the Phase IIb trial, the large size of the program (approx. 1,000 patients), the increase in the number of treatments given to patients in the U.S. (6 treatments in the U.S. trials vs. 4 treatments in the European trials) and the larger average U.S. patient BMI, we believe there is a very high probability that the U.S. Phase III program will succeed.



## MEDACorp Regulatory KOL Believes ATX-101 is Approvable Based on Comprehensive Data Package

- **We spoke with a MEDACorp Regulatory Key Opinion Leader (KOL) with significant expertise in dealing with the FDA's Dermatologic Drugs Division.**
  - Overall, he was impressed with the thorough manner in which Kythera has conducted its clinical program for ATX-101 as well as the quality of the European Phase III and the U.S. Phase IIb data.
- **FDA likely to provide timely review of the ATX-101 data package given the lack of novel products in this area and the fact that it fulfills an unmet need.**
- **The quality and breadth of Kythera's ATX-101 data package is very positive according to the KOL.**
  - He noted that the European Phase III data are "very impressive" and the safety margin looks "very good".
  - The KOL stated that it is extremely important to have a clean safety profile when submitting aesthetic products for approval at FDA. Local side effects are not concerning to him as long as systemic safety is clean.
- **The KOL believes that Kythera went "above and beyond" when designing its U.S. Phase IIb and Phase III trials by including MRI sub-studies in addition to including not only the clinician-reported submental fat rating scale but also the patient-reported submental fat rating scale.**
- **Besides a clean safety profile & endpoints that include clinician and patient assessments, the KOL noted that it is important to demonstrate speed to benefit and durability of improvement to the FDA.**
  - Phase II (U.S. and European) and Phase III (European) data indicate that improvement in submental fat has been assessed by patients and clinicians less than 4 weeks after the first injection.
  - A long-term Phase II follow-up study is currently ongoing capturing up to five years of data on patients who have completed Phase II studies. A preliminary analysis of Phase IIa patients followed for two years indicated that >90% of patients maintained at least the same level of aesthetic correction that was achieved during the preceding clinical trial. In addition, no long-term safety concerns were noted in the preliminary analysis.



## MEDACorp Survey of 62 U.S.-Based Dermatologists & Plastic Surgeons Highlights Significant Interest in ATX-101

- **Dermatologists and plastic surgeons are eager to use ATX-101.** 80%+ of MEDACorp survey respondents indicated that they would consider using ATX-101 in their practices and 67% of physicians surveyed would use moderate to high levels of promotion surrounding ATX-101.
- **Submental fat is a considerable issue for patients today.** Dermatologists and plastic surgeons estimated that ~15% of their patients can be treated for submental fat. Dermatologists estimate that ~13% of their patients complain about submental fat while plastic surgeons estimate ~18% of their patients complain about this issue.
- **Survey respondents predict a solid launch trajectory for ATX-101.** Within 24 months of availability, respondents estimate ~20% of experienced facial injectable patients will have used ATX-101. In line with our revenue model forecasts and facial aesthetic market trends, survey respondents expect more patients to undergo ATX-101 treatment in addition to other treatments vs. ATX-101 treatment alone.
- **ATX-101 expected to attract new patients.** Overall, physicians expect ATX-101 availability to increase new patients in their practices by ~13% after 24 months. Dermatologists estimate an ~11% increase and plastic surgeons estimate a ~16% increase.
- **In general, patient follow-up is expected to be good.** Survey respondents estimate that ~77% of patients will undergo at least 2 ATX-101 treatments and ~43% will complete the six treatment regimen. Dermatologists' answers were generally in line with plastic surgeons.
- **Dermatologists and plastic surgeons are very interested in ATX-101 utilization on additional body parts.** ~42% of respondents indicated they would be interested in using ATX-101 on other body parts even without an FDA label. Physicians cited "love handles", outer thighs and arms as potential areas of the body that they would consider using ATX-101 on.

KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012

# We Surveyed 62 U.S.-Based Dermatologists and Plastic Surgeons to Garner Insights on Kythera's ATX-101



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Overall, 33 Dermatologists and 29 Plastic Surgeons were surveyed with practices located across the United States.



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Over 80% of Physicians Surveyed Would Consider Using ATX-101 in Their Practices

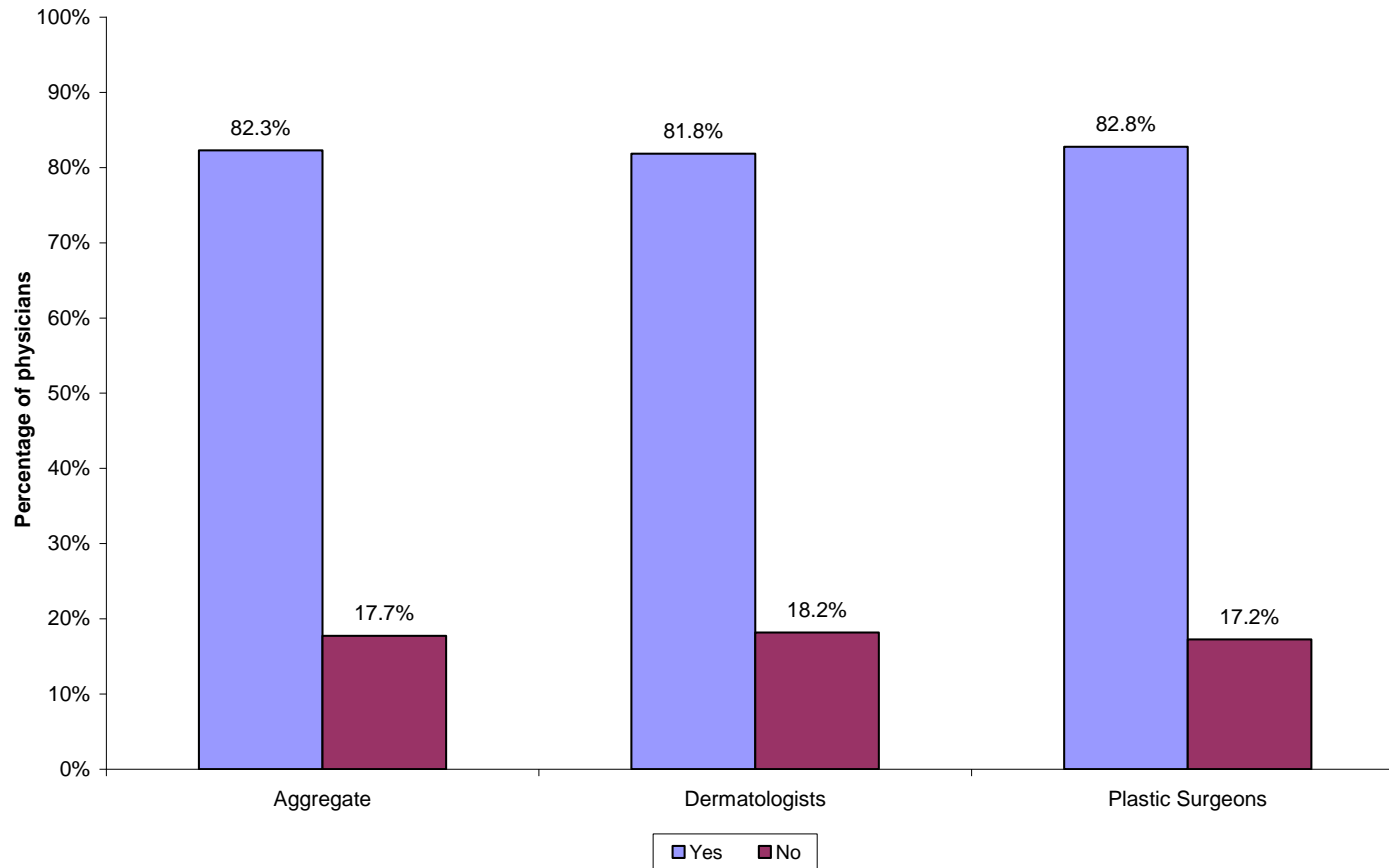
KYTERA BIOPHARMACEUTICALS, INC.

November 5, 2012



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Would you consider using ATX-101 in your practice?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012



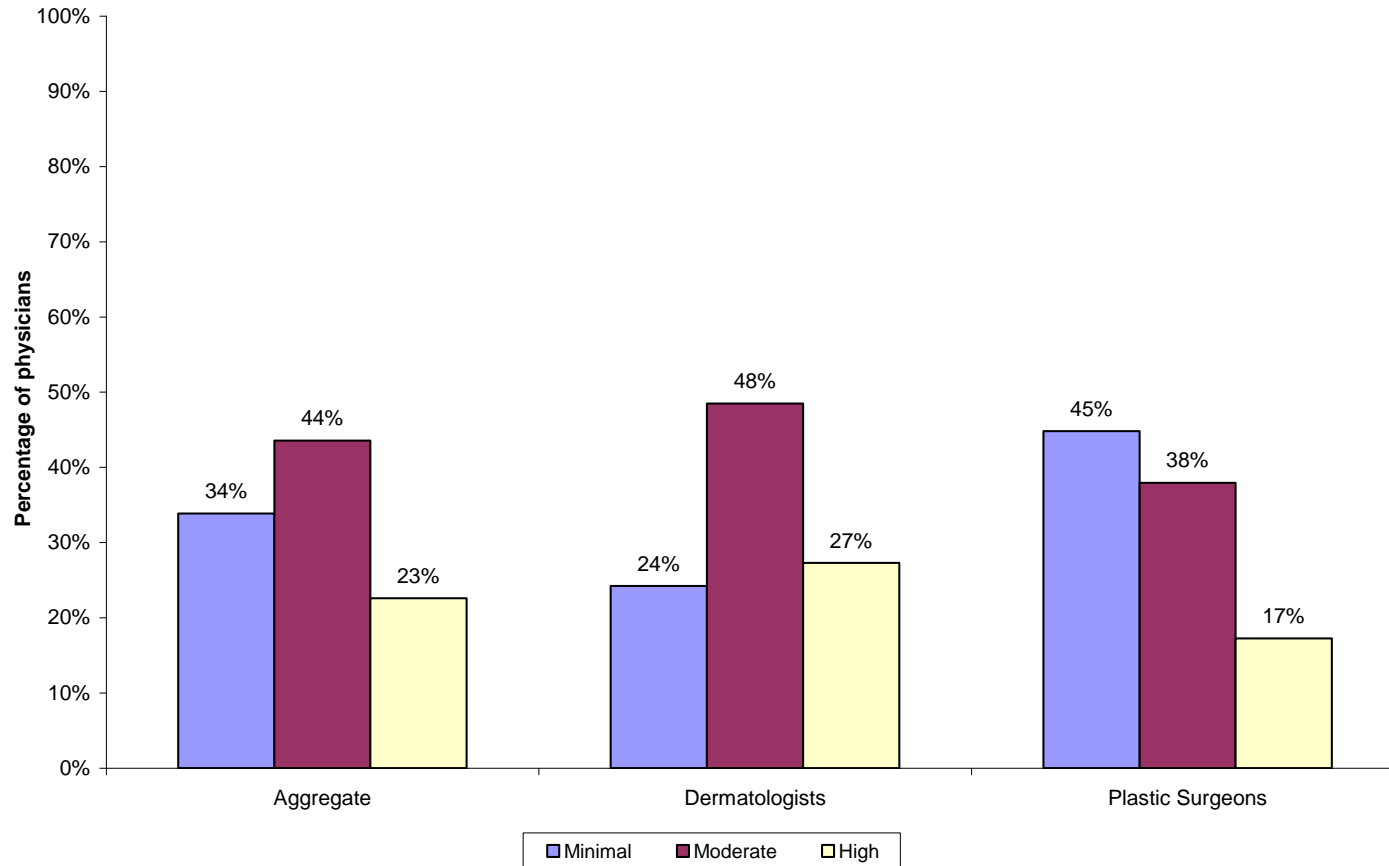
KYTERA BIOPHARMACEUTICALS, INC. November 5, 2012

# A Majority of Physicians Would Actively Promote ATX-101 to Patients Using Moderate to High Promotion



LEERINK SWANN

How actively would you promote ATX-101 to current and prospective patients?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Dermatologists Would Mainly Promote ATX-101 as Part of Promotional Advertising; Majority of Plastic Surgeons Would Promote During Conversations with New Patients

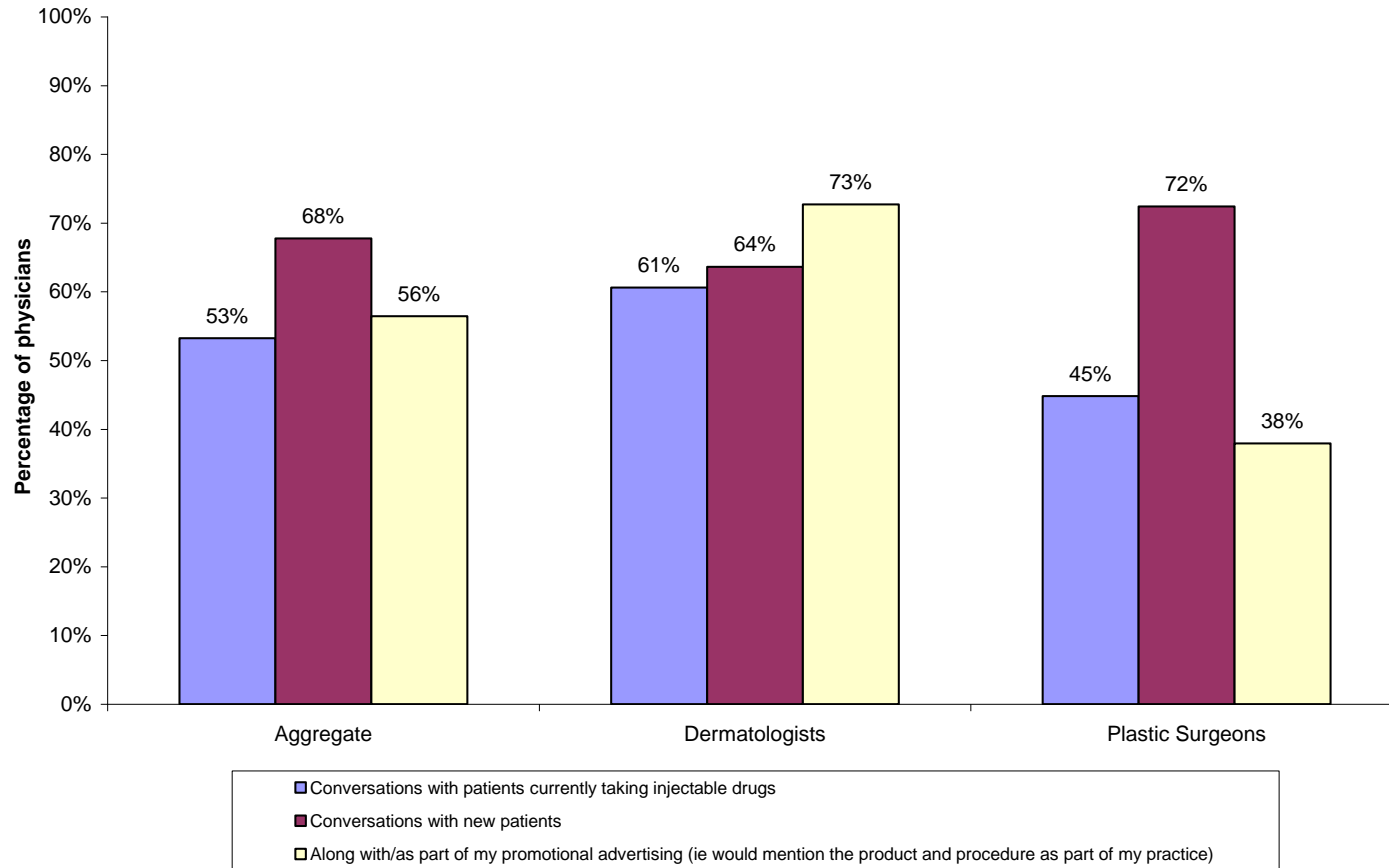
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November 5, 2012



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How would you plan on promoting ATX-101 within 12 months of approval?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# In Aggregate, Respondents Estimate ~15% of Patients Can Be Treated for Submental Fat

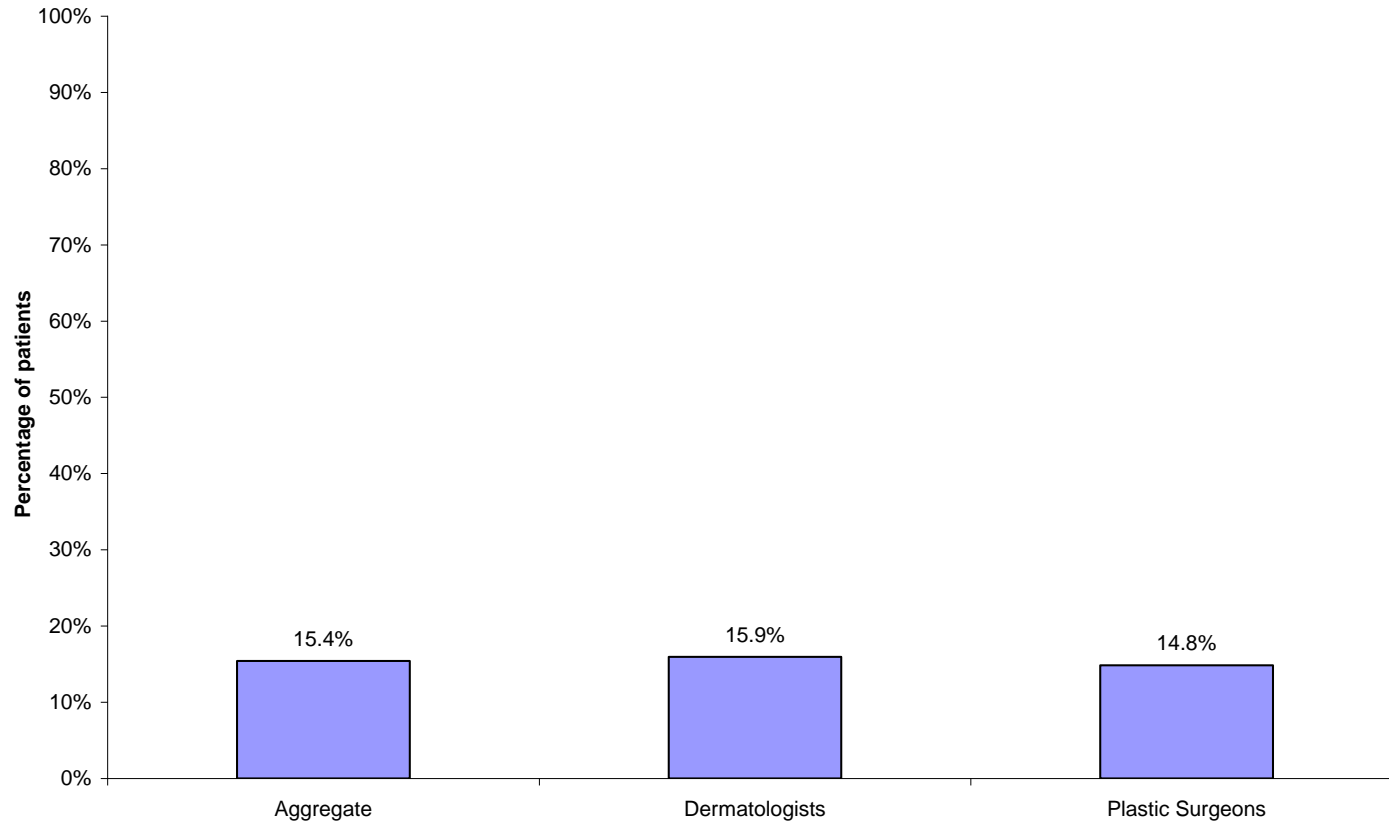
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**Please estimate the percentage of your patients you believe can be treated for submental fat/double-chin?**



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

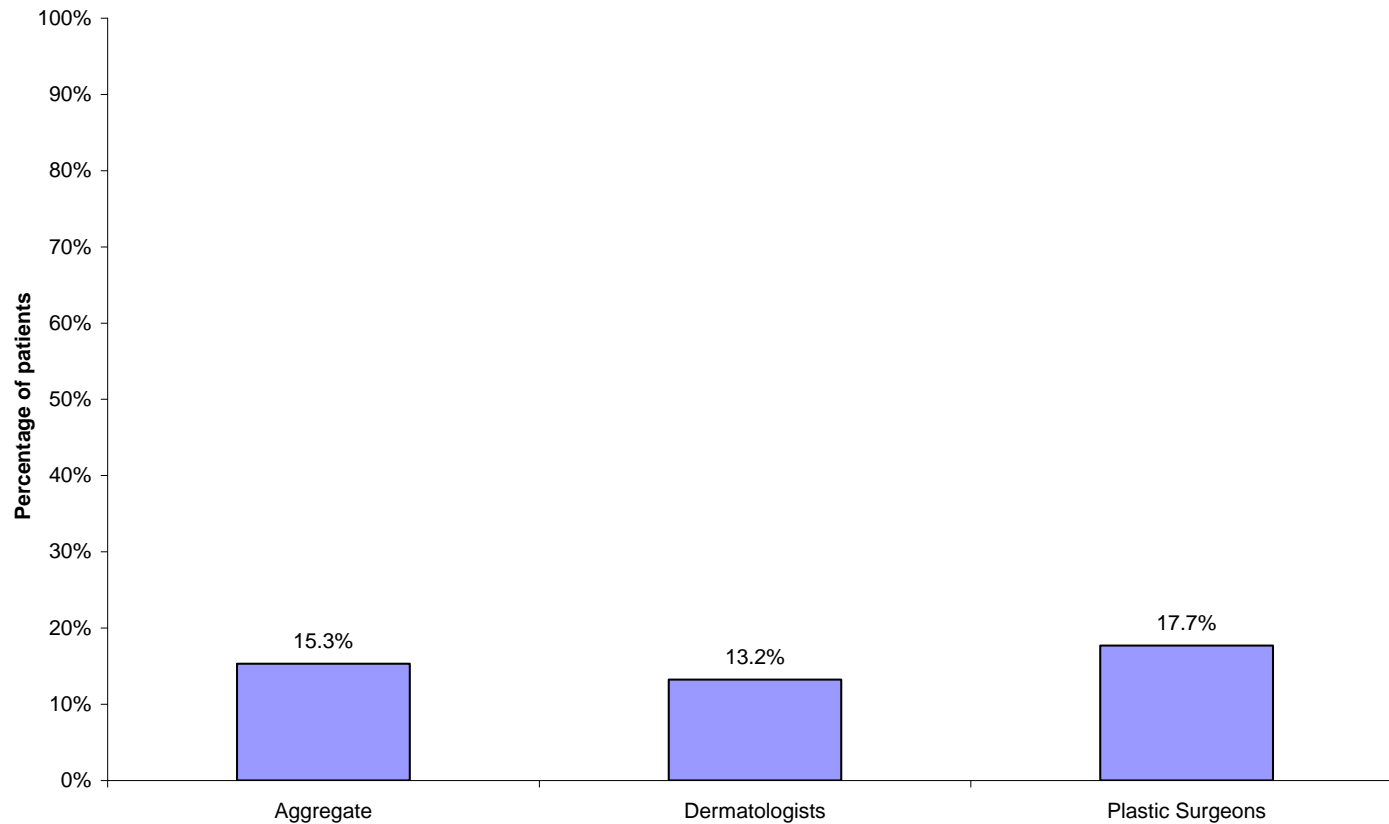
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# Respondents Estimate ~15% of Patients Complain About Submental Fat, In Line with Overall Treatment Estimate



LEERINK SWANN

What percent of patients you currently see complain of submental fat/double-chin?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Assuming Cost of \$600 per Treatment, Respondents Estimate ~20% of Patients with Toxin/Filler Experience to Use ATX-101 Within 24 Months of Availability

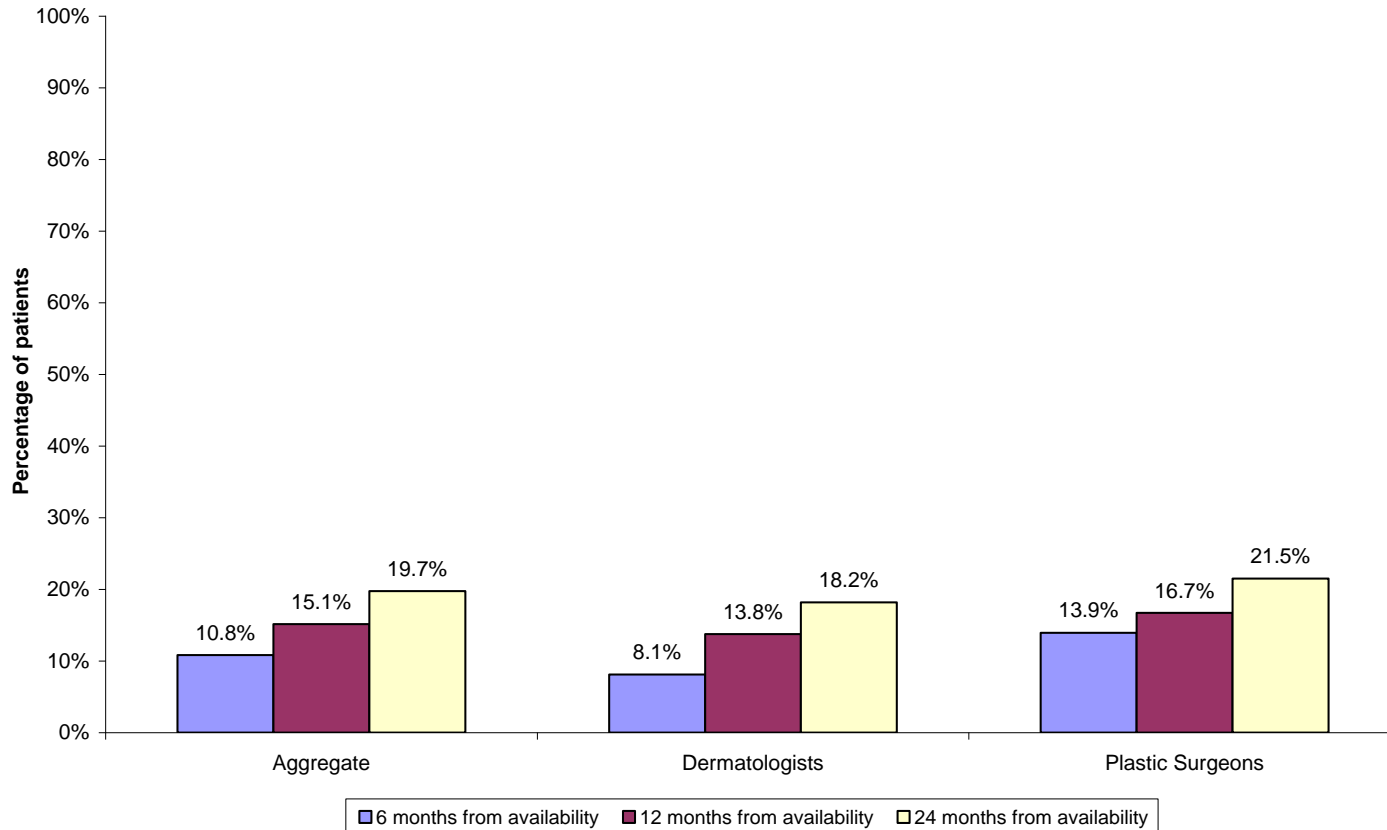
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November 5, 2012



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Assuming cost per treatment of \$600 (\$300 to \$400 being drug cost) for a total of 6 treatments, what percent of your patients who have had toxin/filler treatments do you expect will use ATX-101?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Respondents Note that ATX-101 May Be More Appealing to Aesthetic Procedure Experienced Patients

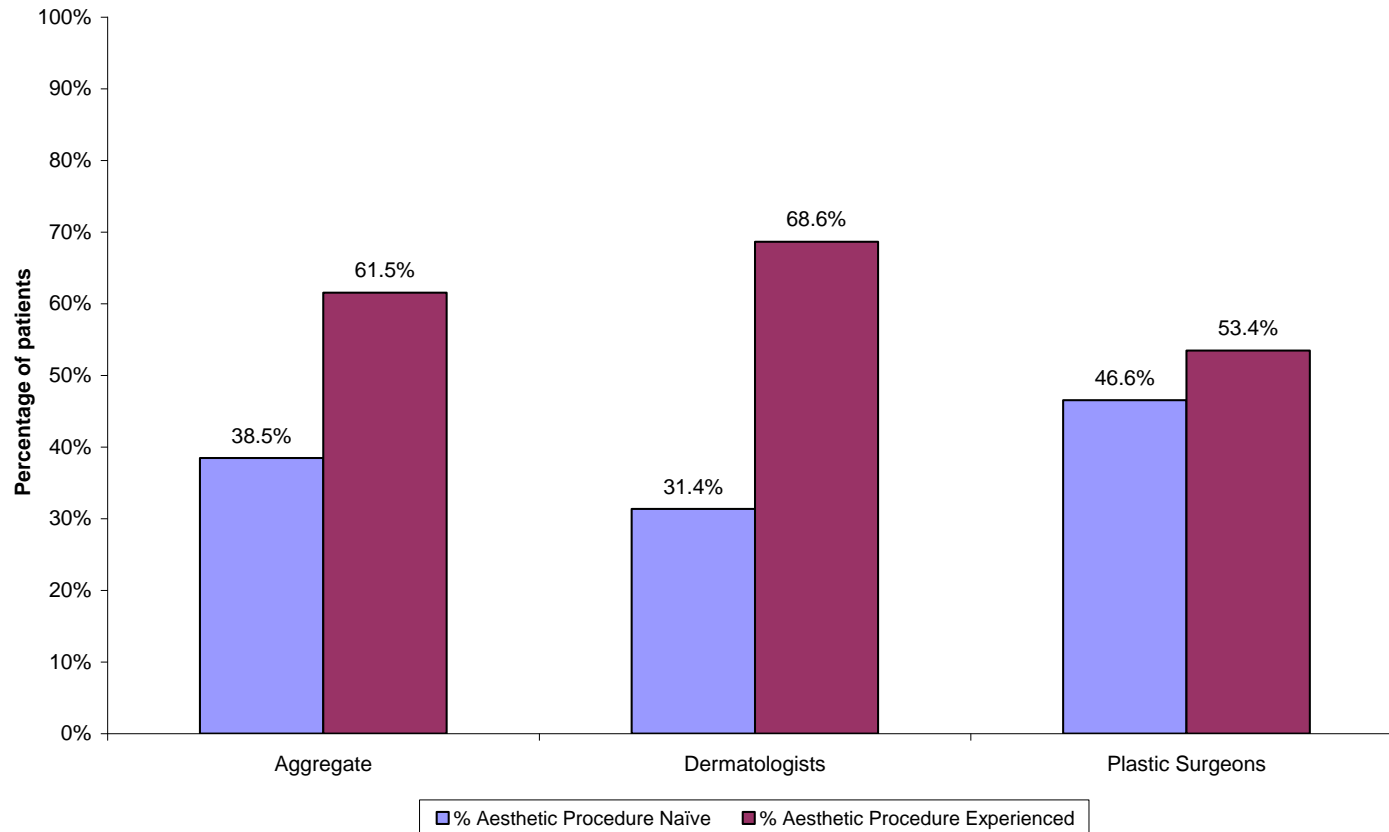
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Please estimate the percent of all patients who undergo ATX-101 treatments that will be either aesthetic procedure experienced patients versus aesthetic procedure naïve patients?



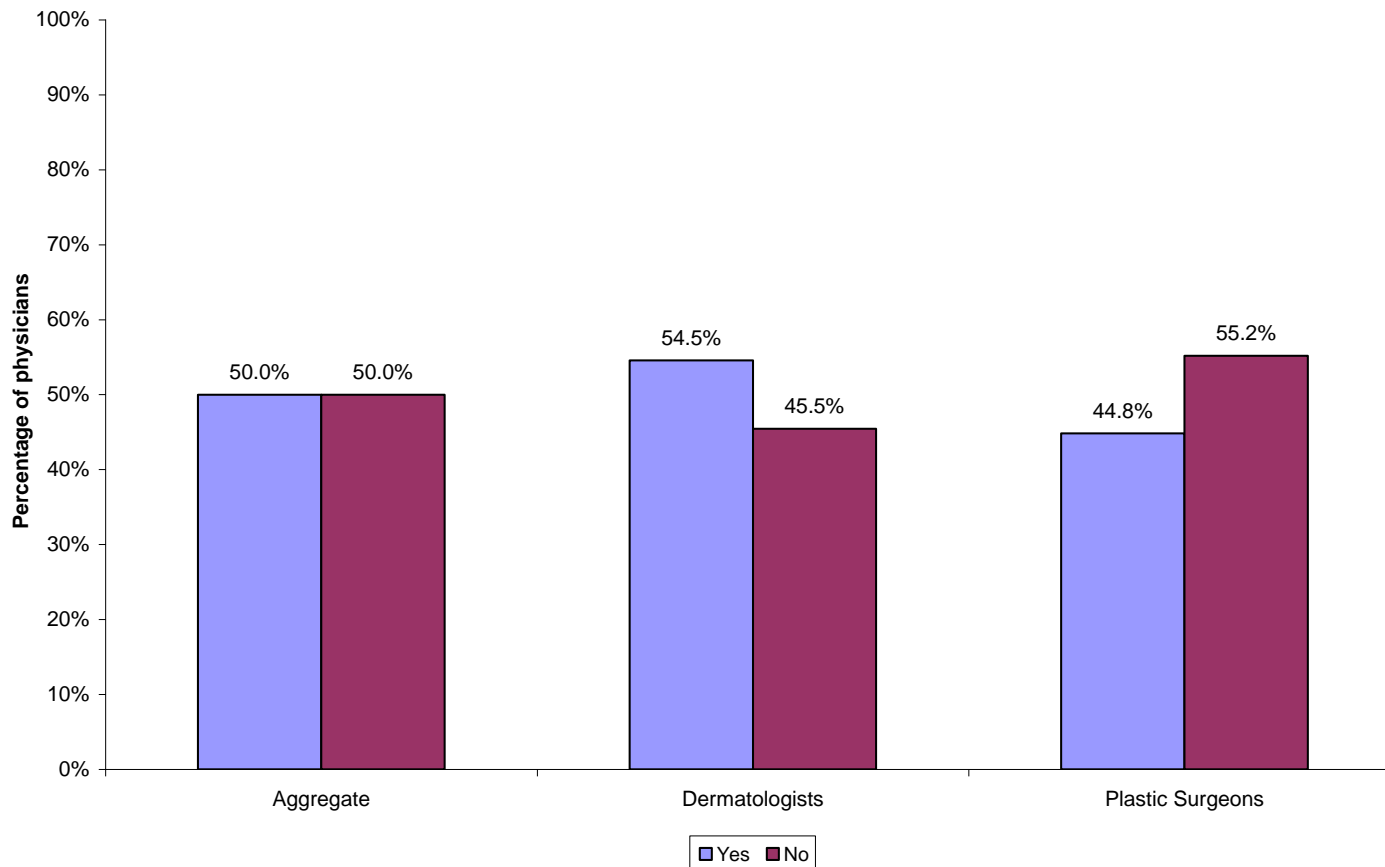
Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Half of Physicians Surveyed Believe ATX-101 Will Increase the Number of New Patients in Their Practices



LEERINK SWANN

Do you expect ATX-101 to increase the number of new patients in your practice?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Overall, Respondents Predict ATX-101 May Increase the Percentage of New Patients in Their Practices by ~13% in 24 Months from Availability

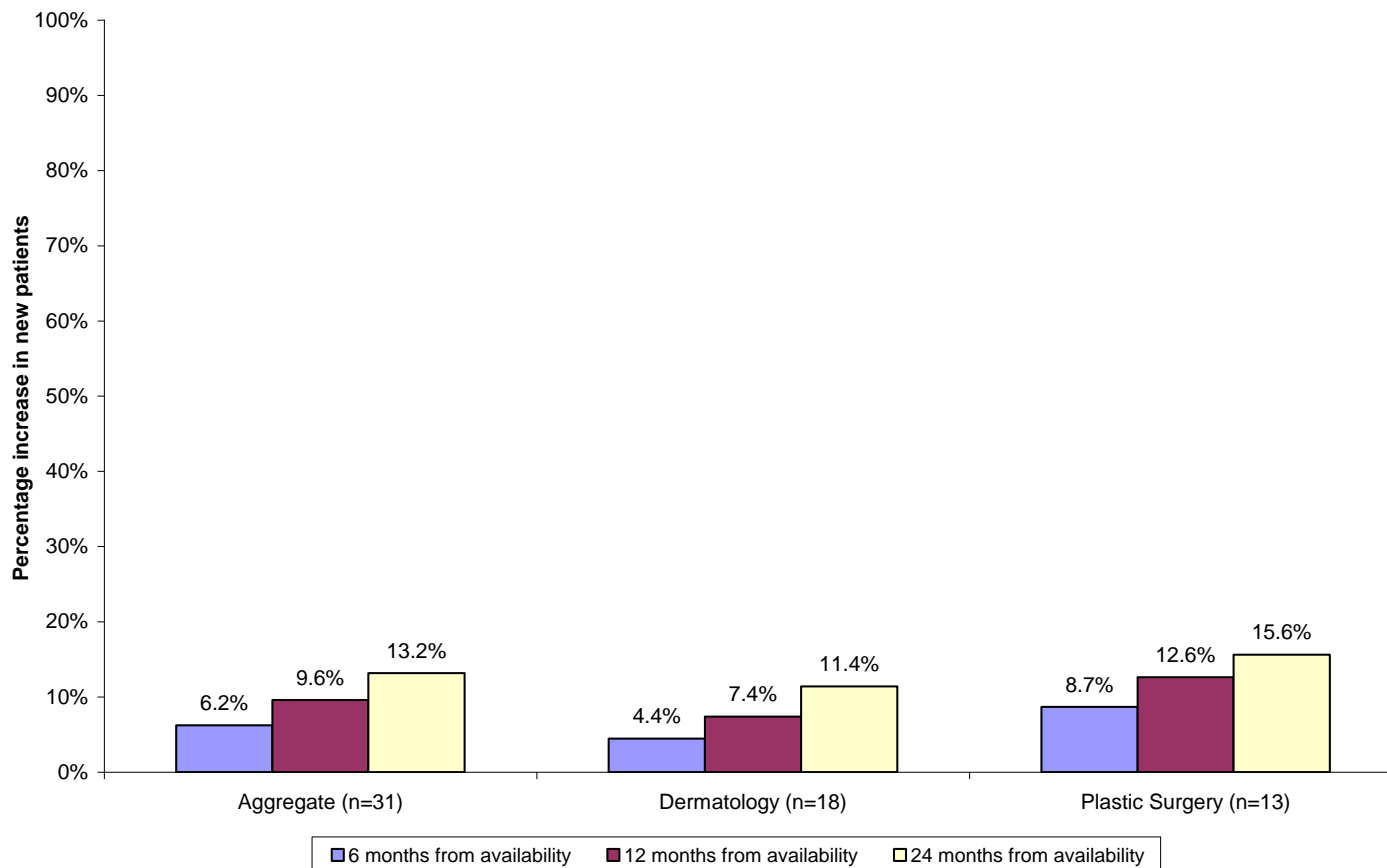
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By what percent do you expect ATX-101 to increase the number of new patients in your practice?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012



# Respondents Expect More Patients to Undergo ATX-101 Treatment in Addition to Other Treatments vs. ATX-101 Only

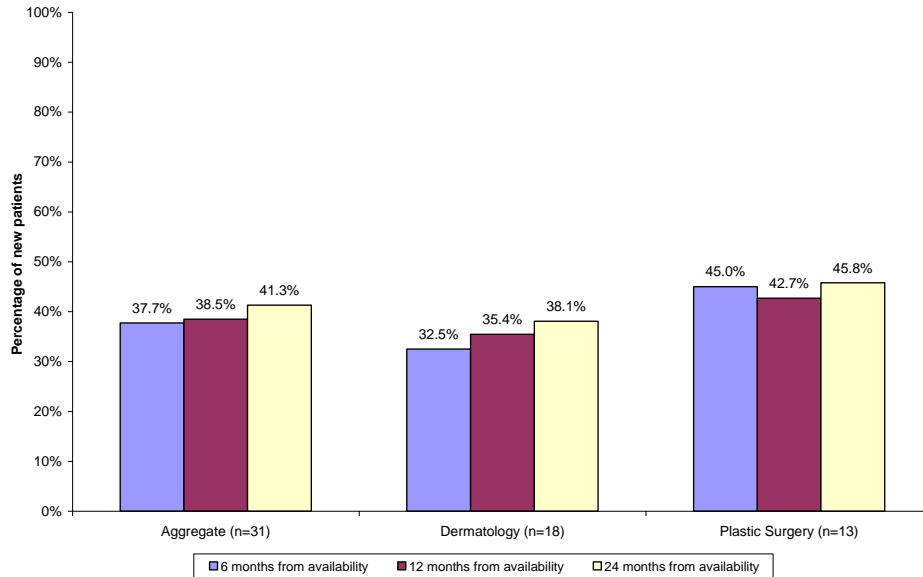
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November 5, 2012

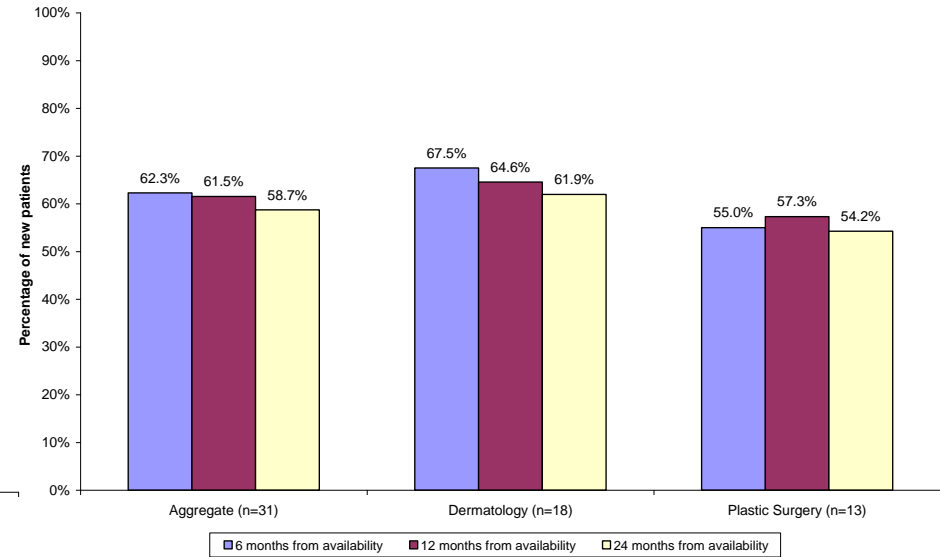


LEERINK SWANN

Of these new patients, what percent do you expect will only undergo ATX-101 treatment at each of the following time points?



Of these new patients, what percent do you expect will undergo ATX-101 treatment in addition to other treatments at each of the following time points?



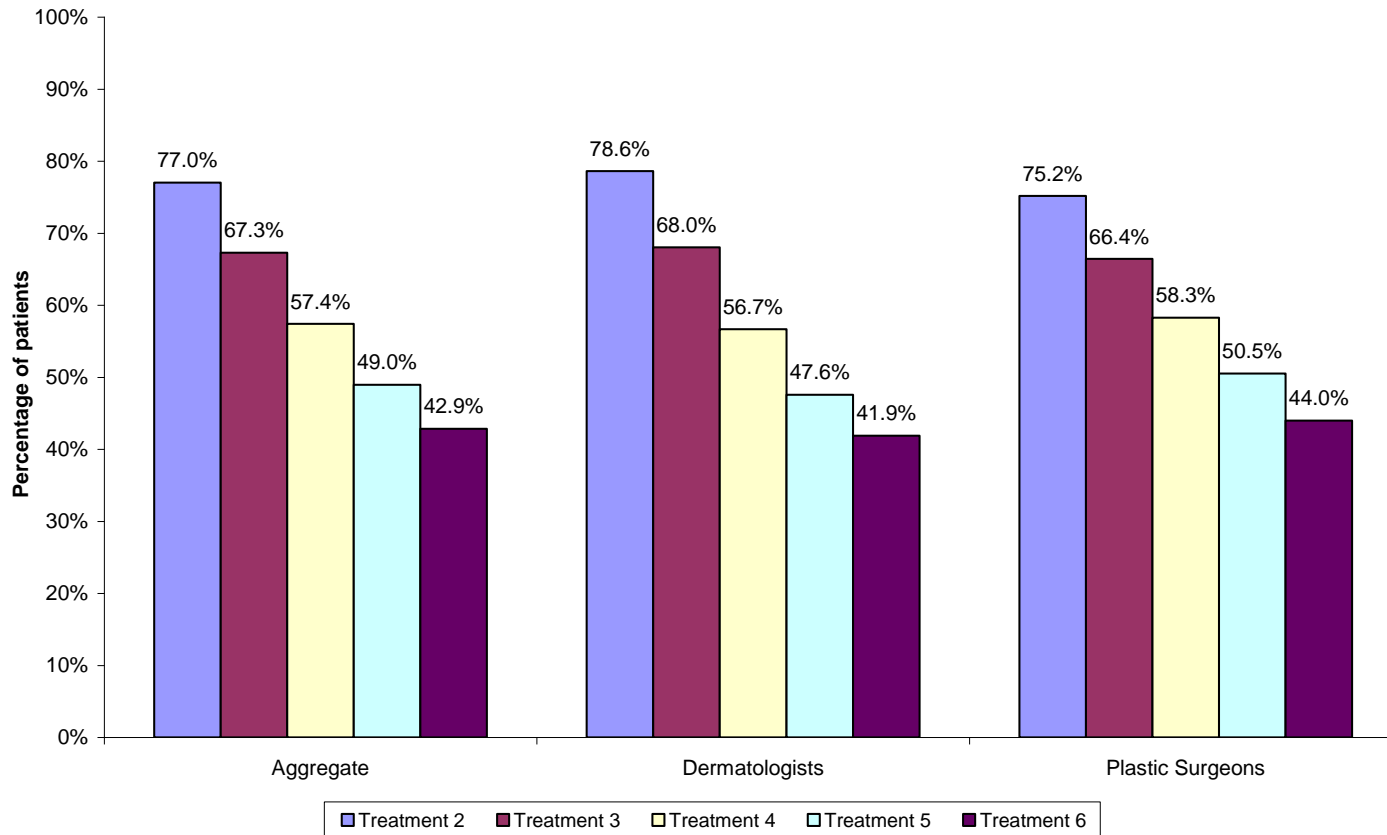
Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# KYTHERA BIOPHARMACEUTICALS, INC. November 5, 2012 Respondents Believe 77% of Patients Will Complete 2 ATX-101 Treatments But ~43% Will Complete All 6 Recommended Treatments; Dermatologists' & Plastic Surgeons' Responses Generally In Line



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Based on your experience, please provide your best guess as to the percentage of patients that start ATX-101 that will complete each the recommended follow-up treatments



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# Overall, Respondents Expect 2.4 Months Between ATX-101 Follow-Up Visits

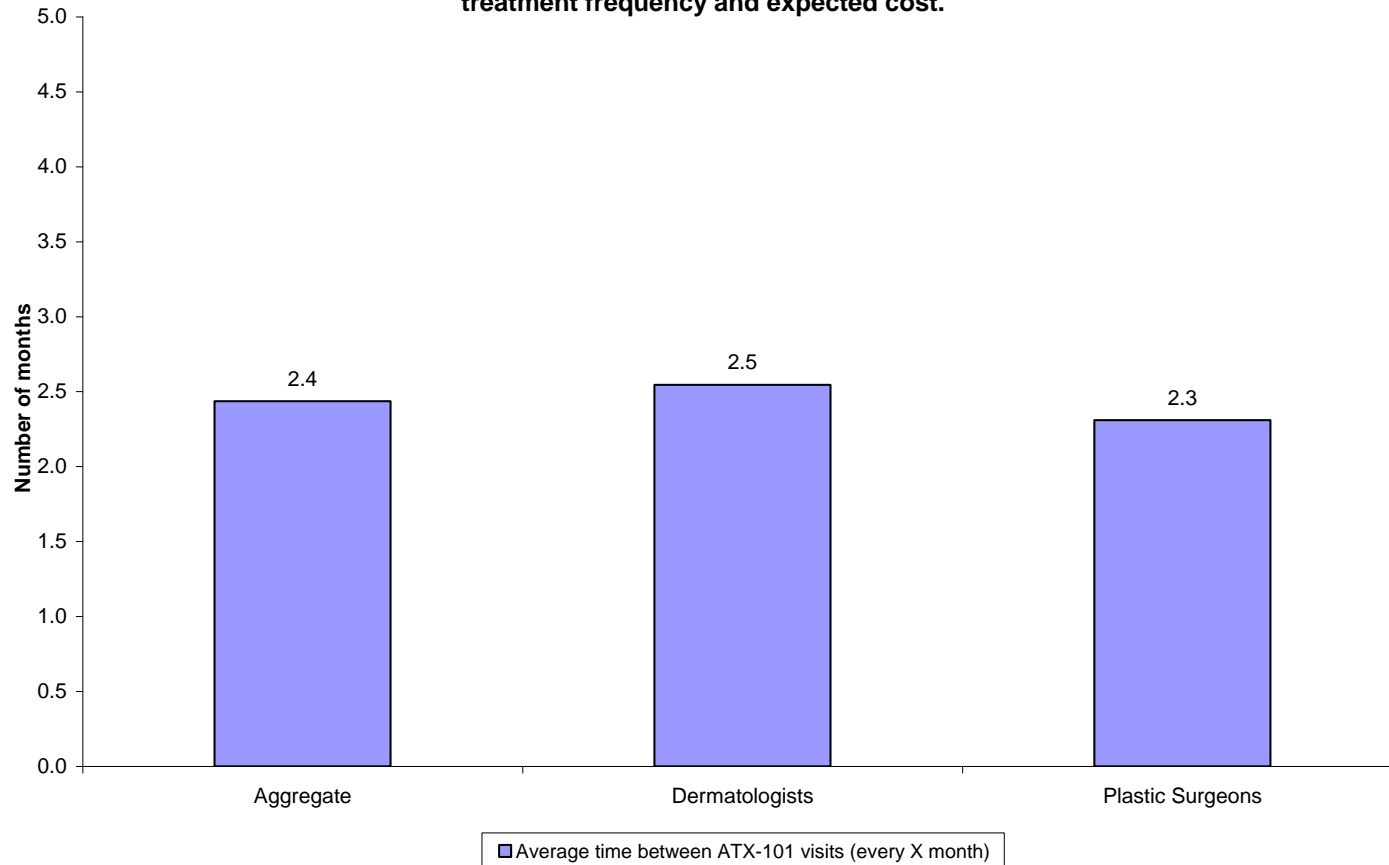
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November 5, 2012



LEERINK SWANN

Based on your clinical experience with other injectable treatments, please estimate what you expect will be the average time between visits for ATX-101 considering the recommended treatment frequency and expected cost.



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# ~42% of Respondents Would Consider Using ATX-101 on Other Parts of the Body; More Dermatologists vs. Plastic Surgeons Would Consider This Without an FDA Label

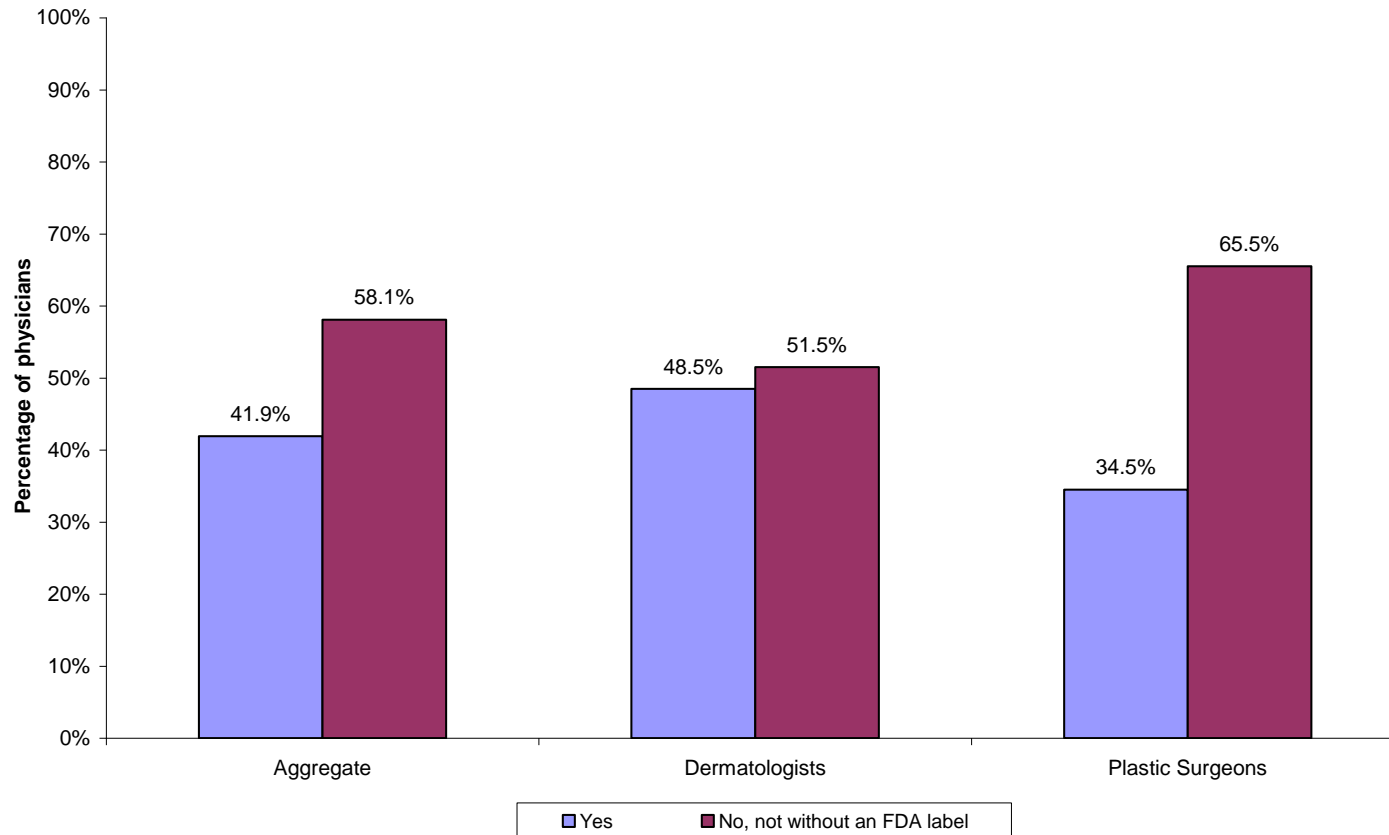
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November 5, 2012



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Would you consider using ATX-101 on other parts of the body beyond the chin?



Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

# In General, Other Body Parts that Physicians Would Consider Using ATX-101 on are the Abdomen, Thighs, and Arms

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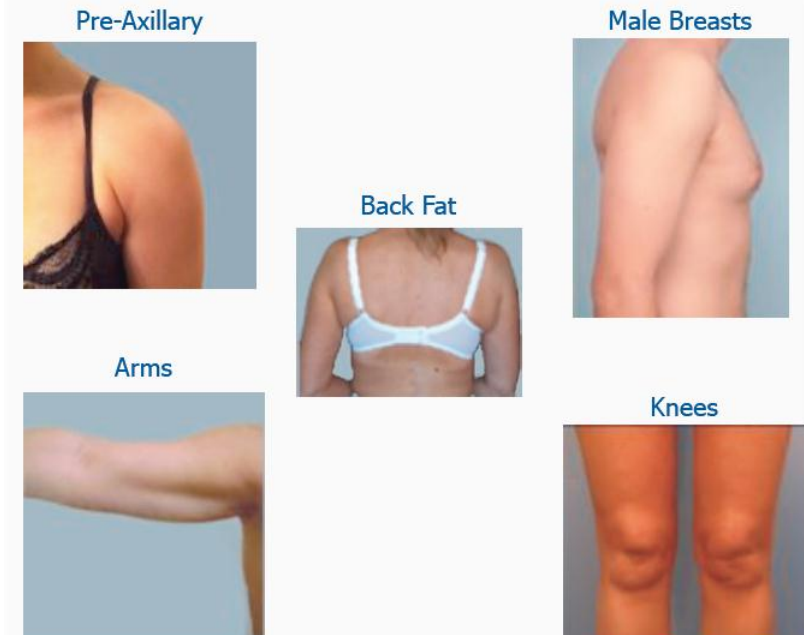


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Type of Physician	Comment
Dermatologist	Under eyes
Dermatologist	Neck
Dermatologist	Breasts, love handles, abdomen
Dermatologist	Abdomen
Dermatologist	Thighs
Dermatologist	Focal treatment on abdomen if not cost prohibitive
Dermatologist	Abdomen
Dermatologist	Lipomas
Dermatologist	Love handles; under arms calves and under eyes and lipomas
Dermatologist	Abdomen
Dermatologist	Lipomas
Dermatologist	Flanks, arms
Dermatologist	Abdomen, buttocks
Dermatologist	Below eyes
Dermatologist	Arms, ABD
Dermatologist	Abdomen
Plastic Surgeon	Problem areas
Plastic Surgeon	Outer thighs
Plastic Surgeon	Under eyes
Plastic Surgeon	Any area with appropriate fat deposit
Plastic Surgeon	Abdomen, arms, thighs
Plastic Surgeon	Arms, lower abdomen
Plastic Surgeon	Jowl
Plastic Surgeon	Breasts, abdomen
Plastic Surgeon	Abdomen, thighs, localized fat bulges

Source: MEDACorp Survey, "Trends in Cosmetic Procedures in 2Q:12", July 2012

## Examples of Localized Fat Reduction



Source: Kythera Corporate Presentation June 2012



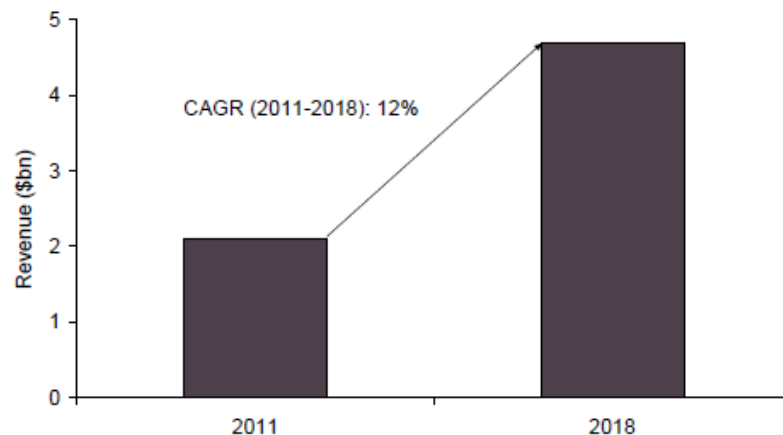
# APPENDIX SLIDES



## Fast-Paced Growth of Facial Aesthetics Market Provides Significant Opportunity

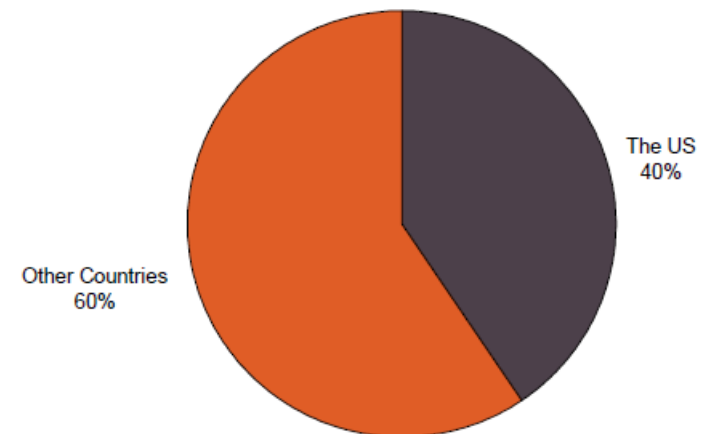
- In 2011, the American Society of Plastic Surgeons (ASPS) reported that overall, cosmetic minimally-invasive procedures grew +123% from 2000 to 2011. These non-surgical, minimally-invasive procedures have been the main growth driver of the cosmetic plastic surgery market with facial injectables such as botulinum toxin and dermal filler injection procedures leading the way.
- The U.S. is the largest market for facial aesthetics according to GlobalData, contributing 40% towards the facial aesthetics market in 2011. In 2011, the U.S. facial aesthetics market was estimated at \$850M and is forecast to grow to over \$2B by 2018 at a 13% CAGR. The main drivers of growth are increasing popularity of botulinum toxin and dermal filler procedures.

**Facial Aesthetics Market, Global, Overall Revenue (\$bn), 2011–2018**



Source: GlobalData Facial Aesthetics Report, April 2012

**Facial Aesthetics Market, US and Other Countries Contribution (%), 2011**



Source: GlobalData Facial Aesthetics Report, April 2012



# Facial Aesthetics Market Growth Driven Primarily by Population Dynamics, Patient Awareness & OUS Expansion

- Younger Generations Driving Future Market Growth
  - The Baby Boomer generation has been instrumental in driving the initial growth of the facial aesthetics market, but future growth is expected to be driven primarily by even younger patients. The average age of a Baby Boomer seeking an aesthetic procedure is 40, but the average age of the “Echo Boomer” (born after 1980) seeking an aesthetic procedure is 28. This is mainly due to a change in cultural sentiment to seek preventative aging measures.
- Patient Awareness of Treatment Options Increasing
  - Allergan and Medicis, the leaders in the facial injectables portion of the aesthetic market, spend a significant (30-40%) portion of revenues on direct-to-consumer advertising, and as a result, patients are able to understand the treatments available to them before consulting dermatologists or plastic surgeons.
- Desire to Look Young Considered a “Need” in Today’s Society
  - Increasing levels of cultural pressure and desire to look young and maintain this appearance are driving more people to undergo facial aesthetic procedures. Additionally, minimally-invasive procedures such as dermal filler injections are often used as maintenance treatments after expensive cosmetic surgery procedures.
- Facial Aesthetics Global Market Growth Fueled by Emerging Economies
  - Growing income levels of the populations in emerging markets such as India, China and Brazil have increased the buying power of people in these regions. Additionally, citizens in these emerging economies are increasingly aware of the availability of facial aesthetic procedures. The emergence of the obesity epidemic and rising rates of physical inactivity in these nations also increases the demand for minimally-invasive cosmetic procedures such as facial injectables.





## Financial Terms of Collaboration Agreement With Bayer Dermatology are Positive

- In August 2010, Kythera entered into a collaboration arrangement with Bayer Dermatology to develop and commercialize ATX-101 outside the United States and Canada receiving an upfront payment of \$14.6M.
- In May 2012, Kythera received a \$15.8M payment from Bayer triggered by Bayer's decision to pursue continued development and regulatory approval of ATX-101 in OUS markets. Kythera also received \$17.4M from Bayer to fund further global development activities of ATX-101 under the terms of the collaboration arrangement.
- Kythera is eligible to receive up to ~\$297M in additional payments contingent upon Bayer's achievement of specified regulatory and commercialization milestones pursuant to the collaboration arrangement. We assume these are weighted heavily to commercialization milestones and more modestly to regulatory approval in the first major EU country.
- If ATX-101 is approved for commercial use in territories licensed to Bayer, Kythera will be eligible to receive escalating royalties in the mid- to- high teens based on Bayer's net product sales of ATX-101 (we assume 11-12% in our model).



## Kythera Likely to Buy Out Los Angeles BioMedical Research Institute License




- In August 2005, Kythera entered into a worldwide exclusive license agreement with Los Angeles Biomedical Research Institute (a.k.a. LA Biomed) at Harbor/UCLA Medical Center
- As part of this license agreement, Kythera will pay LA Biomed a milestone payment of \$0.5M upon receipt of marketing approval of ATX-101, as well as non-royalty sublicense fees equal to 10% of any sublicense income, up to an aggregate of \$5M
- Upon commercialization of a licensed product or service, Kythera is obligated to pay low- to mid-single digit royalties on global net product sales of ATX-101. We believe it is highly likely that Kythera would opt to buy out this license agreement with LA Biomed once ATX-101 receives regulatory approval in Europe, the United States and Canada

# Kythera Management Has Significant Experience in Development & Commercialization of Biotechnology and Specialty Pharmaceutical Products



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	<b>Keith Leonard</b> Co-Founder, President and CEO	
	<b>Patricia Walker, M.D. Ph.D.</b> Chief Medical Officer	
	<b>Deepak Chadha, M.S. RAC</b> VP, Regulatory	
	<b>Nancy Jorgesen, M.S.</b> VP, Product Systems & Alliance Management	
	<b>Serge Lichtsteiner, Ph.D.</b> VP, Research	

	<b>Elisabeth Sandoval</b> Chief Commercial Officer	
	<b>John Smither</b> Chief Financial Officer	
	<b>Jeff Webster</b> VP, Operations	
	<b>Susan Lundeen</b> VP, Human Resources	
	<b>Keith Klein</b> General Counsel	

**Kythera's senior management team is made up of highly experienced healthcare executives from Amgen, Allergan and Pfizer.**



# Kythera Board of Directors

Name	Description
Keith R. Leonard, Jr.	<ul style="list-style-type: none"> <li>- Kythera co-founder, President and CEO</li> <li>- Member of Board of Directors since August 2005</li> <li>- From October 1991 to November 2004, Mr. Leonard held various positions at Amgen.</li> <li>- From October 2001 to November 2004, Mr. Leonard served as Senior Vice President and General Manager of Amgen Europe where he was responsible for all commercial operations in 28 European countries</li> <li>- Prior to that role, Mr. Leonard established Amgen's presence in rheumatology with the creation of the Rheumatology Business Unit, served as Head of Information Management, and served in leadership roles in sales and marketing, engineering, operations, and finance</li> </ul>
Nathaniel David, Ph.D.	<ul style="list-style-type: none"> <li>- Co-founder and served as Kythera Board member since inception in 2005 and as oChief Science Officer from inception until August 2009</li> <li>- In November 2002, Dr. David co-founded Syrrx, Inc., a biotechnology company, which was acquired by Takeda Pharmaceutical Company Limited and Achaogen</li> <li>- Dr. David was named one of the top 100 innovators in the world under 35 (2002) by the MIT Technology Review and holds numerous pending and issued patents in fields such as nanovolume crystallography, antibiotic resistance, energy production and aesthetic medicine</li> </ul>
Dennis Fenton, Ph.D.	<ul style="list-style-type: none"> <li>- Served on the Board since June 2006</li> <li>- Now retired, Dr. Fenton most recently served as Executive Vice President of Operations at Amgen from 2000 to 2008, where he was responsible for worldwide operations, manufacturing, process development and quality</li> <li>- Starting in 1982, Dr. Fenton held numerous executive leadership roles in operations and sales and marketing at Amgen.</li> </ul>
Hironori Hozoji	<ul style="list-style-type: none"> <li>- Served on the Board since May 2008</li> <li>- Mr. Hozoji is a seasoned venture capitalist with 16 years of experience at JAFECO Co., Ltd., a venture capital firm, in Tokyo, Japan</li> <li>- Since July 2002 he has served as an Investment Officer at JAFECO Life Science Investment in San Diego, California</li> <li>- Mr. Hozoji has led more than 50 investments totaling over \$200 million in the U.S., Europe and Asia</li> </ul>
François Kress	<ul style="list-style-type: none"> <li>- Served on the Board since October 2010</li> <li>- Mr. Kress serves as President and Chief Executive Officer for The ROW, a luxury fashion brand</li> <li>- Prior to joining The ROW, Mr. Kress served as President and Chief Executive Officer of US Operations for Prada S.A.</li> <li>- Mr. Kress was previously Chief Executive Officer and Managing Director of Bulgari Corporation of America</li> <li>- Prior to that experience, Mr. Kress held numerous positions within LVMH (Moët-Hennessy Louis Vuitton), a fashion company, including President of Fendi North America, Chief Executive Officer of the LVMH Fashion Group Oceania (Australia and New Zealand) and President of Louis Vuitton Malletier Thailand</li> </ul>

Source: Company information




# Kythera Board of Directors, continued

Name	Description
Robert T. Nelsen	<ul style="list-style-type: none"> <li>- Served on the Board since January 2006</li> <li>- Since 1994, Mr. Nelsen has served as a co-founder, assistant secretary and managing director of ARCH Venture Partners, a venture capital firm focused on early-stage technology companies</li> <li>- Mr. Nelsen has played a significant role in the early sourcing, financing and development of more than 30 companies</li> <li>- Mr. Nelsen is a director of Sapphire Energy, Inc., Ikaria, Inc., Fate Therapeutics, Inc., Agios Pharmaceuticals Inc., Ensemble Discovery Corp. and NeurogesX, Inc., among other companies, and previously served as a director of Adolor Corp., Illumina, Inc. and Caliper Life Sciences, Inc.</li> </ul>
Camille Samuels	<ul style="list-style-type: none"> <li>- Served on the Board since inception of Kythera in August 2005</li> <li>- Ms. Samuels joined Versant Ventures, a venture capital firm, in 2000 where she currently serves as a Managing Director</li> <li>- Prior to joining Versant Ventures, Ms. Samuels led Tularik Inc.'s Technology Acquisition Group and was responsible for business development at Tularik, Inc. (subsequently acquired by Amgen, Inc.)</li> <li>- Prior to that role, Ms. Samuels worked in business development and strategic planning at Genzyme Corporation, a biotechnology company, and Millennium Predictive Medicine Inc. and as a management consultant to healthcare and biotech companies at LEK Consulting.</li> </ul>
David Schnell, M.D.	<ul style="list-style-type: none"> <li>- Served on the Board since May 2006</li> <li>- Dr. Schnell co-founded and has been a Managing Director at Prospect Venture Partners since 1997</li> <li>- Prior to that experience, Dr. Schnell served as a Partner at Kleiner Perkins Caufield &amp; Byers (KPCB), a venture capital firm</li> <li>- Prior to KPCB, Dr. Schnell served in various executive management positions in product marketing, strategic operations and business development in the U.S. and Switzerland at Sandoz Pharmaceuticals (presently Novartis International AG), a pharmaceutical company</li> </ul>
Joseph L. Turner	<ul style="list-style-type: none"> <li>- Served on the Board since January 2008</li> <li>- Mr. Turner retired from active employment in 2006 and currently serves on the board of directors of several companies</li> <li>- From 1999 to 2006, Mr. Turner served as the Chief Financial Officer at Myogen, Inc., a pharmaceutical company, where he led several rounds of financing and was pivotal in the negotiation of the sale of the company to Gilead Sciences</li> <li>- Prior to that experience, from 1992 to 1996, Mr. Turner served as Vice President of Finance at Cortech, Inc., a biopharmaceutical company</li> <li>- Mr. Turner has also served in other finance roles including Director of Finance, Eli Lilly and Company, a biopharmaceutical company, (Switzerland); Treasurer, Eli Lilly and Company (Switzerland); and Vice President of Finance, Centaur Pharmaceuticals, a pharmaceutical company</li> </ul>

Source: Company information

## TRENDS IN COSMETIC PROCEDURES IN 2Q:12

Respondent Distribution		 <p><b>Geographic Distribution</b> Source: Google Maps</p>
Specialty	Dermatology and Plastic Surgery	
Trend	Cosmetic Procedures	
Number of Respondents	33 Dermatologists and 29 Plastic Surgeons	
Respondent Distribution	United States	
Survey Date	July 2012	

Responses represent an average of the aggregate (n=62), dermatologist (n=33) and plastic surgeon (n=29) responses, unless otherwise noted.

### Inclusion Criteria

S1. Which of the following best describes your specialty?

53.2%	Dermatology
46.8%	Plastic Surgery

S2. In a given *month*, how many breast augmentation procedures do you typically perform?

	Plastic Surgery
Breast augmentation procedures - <b>MEAN</b>	15.2
Breast augmentation procedures - <b>MEDIAN</b>	12
Breast augmentation procedures - <b>SUM</b>	440

S3. In a given *month*, in how many patients do you perform procedures using botulinum toxins?

	Aggregate	Dermatology	Plastic Surgery
Procedures using botulinum toxins - <b>MEAN</b>	57.9	79.7	33.1
Procedures using botulinum toxins - <b>MEDIAN</b>	35.5	50	23
Procedures using botulinum toxins - <b>SUM</b>	3,591	2,631	960

S4. In a given *month*, in how many patients do you perform procedures using dermal fillers?

	Aggregate	Dermatology	Plastic Surgery
Procedures using dermal fillers - <b>MEAN</b>	36.3	45.1	26.3
Procedures using dermal fillers - <b>MEDIAN</b>	26	40	20
Procedures using dermal fillers - <b>SUM</b>	2,251	1,489	762

**ATX-101 -- See Appendix II for product description**

1. Would you consider using ATX-101 in your practice?

	Aggregate	Dermatology	Plastic Surgery
Yes	82.3%	81.8%	82.8%
No	17.7%	18.2%	17.2%

2. How actively would you promote ATX-101 to current and prospective patients?

	Aggregate	Dermatology	Plastic Surgery
Minimal	33.9%	24.2%	44.8%
Moderate	43.5%	48.5%	37.9%
High	22.6%	27.3%	17.2%

3. How would you plan on promoting ATX-101 within 12 months of approval? Check all that apply.

	Aggregate	Dermatology	Plastic Surgery
Conversations with patients currently taking injectible drugs	53.2%	60.6%	44.8%
Conversations with new patients	67.7%	63.6%	72.4%
Along with/as part of my promotional advertising (i.e., would mention the product and procedure as part of my practice)	56.5%	72.7%	37.9%

4. Please estimate the percentage of your patients you believe can be treated for submental fat/double-chin?

	Aggregate	Dermatology	Plastic Surgery
Percentage of your patients you believe can be treated for submental fat/double-chin	15.4%	15.9%	14.8%

5. What percent of patients you currently see complain of submental fat/double-chin?

	Aggregate	Dermatology	Plastic Surgery
Percentage of patients complain of submental fat/double-chin	15.3%	13.2%	17.7%

6. Assuming cost per treatment of \$600 (\$300 to \$400 being drug cost) for a total of 6 treatments, what percent of your patients who have had toxin/filler treatments do you expect will use ATX-101?

	Aggregate	Dermatology	Plastic Surgery
6 months from availability	10.8%	8.1%	13.9%
12 months from availability	15.1%	13.8%	16.7%
24 months from availability	19.7%	18.2%	21.5%

7. Please estimate the percent of all patients who undergo ATX-101 treatments that will be either aesthetic procedure experienced patients versus aesthetic procedure naïve patients?

	Aggregate	Dermatology	Plastic Surgery
% Aesthetic Procedure Naïve	38.5%	31.4%	46.6%
% Aesthetic Procedure Experienced	61.5%	68.6%	53.4%

8. Do you expect ATX-101 to increase the number of new patients in your practice?

	Aggregate	Dermatology	Plastic Surgery
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Yes	50.0%	54.5%	44.8%
No	50.0%	45.5%	55.2%

By what percent do you expect ATX-101 to increase the number of new patients in your practice?

	Aggregate (n=31)	Dermatology (n=18)	Plastic Surgery (n=13)
6 months from availability	6.2%	4.4%	8.7%
12 months from availability	9.6%	7.4%	12.6%
24 months from availability	13.2%	11.4%	15.6%

Of these new patients, what percent do you expect will only undergo ATX-101 treatment at each of the following time points??

Only ATX-101	Aggregate (n=31)	Dermatology (n=18)	Plastic Surgery (n=13)
6 months from availability	37.7%	32.5%	45.0%
12 months from availability	38.5%	35.4%	42.7%
24 months from availability	41.3%	38.1%	45.8%

ATX-101 and other treatments	Aggregate (n=31)	Dermatology (n=18)	Plastic Surgery (n=13)
6 months from availability	62.3%	67.5%	55.0%
12 months from availability	61.5%	64.6%	57.3%
24 months from availability	58.7%	61.9%	54.2%

9. Based on your experience, please provide your best guess as to the percentage of patients that start ATX-101 that will complete each the recommended follow-up treatments.

	Aggregate	Dermatology	Plastic Surgery
Treatment 2	77.0%	78.6%	75.2%
Treatment 3	67.3%	68.0%	66.4%
Treatment 4	57.4%	56.7%	58.3%
Treatment 5	49.0%	47.6%	50.5%
Treatment 6	42.9%	41.9%	44.0%

10. Based on your clinical experience with other injectible treatments, please estimate what you expect will be the average time between visits for ATX-101 considering the recommended treatment frequency and expected cost.

	Aggregate	Dermatology	Plastic Surgery
Average time between ATX-101 visits (every X month)	2.4	2.5	2.3

11. Would you consider using ATX-101 on other parts of the body beyond the chin?

	Aggregate	Dermatology	Plastic Surgery
Yes, if so, please indicate areas of interest: <i>See Appendix</i>	41.9%	48.5%	34.5%
No, not without an FDA label	58.1%	51.5%	65.5%



**Appendix. Summary of responses.**

**Question 11:** Would you consider using ATX-101 on other parts of the body beyond the chin? If so, please indicate areas of interest.

1	Under eyes
2	Neck
4	Breasts, love handles, abdomen
8	Abdomen
9	Thighs
11	Focal treatment on abdomen if not cost prohibitive
14	Abdomen
16	Lipomas
17	Love handles; under arms calves and under eyes and lipomas
20	Abdomen
24	Lipomas
26	Flanks, arms
29	Abdomen, buttock
30	Below eyes
32	Arms, ABD
33	Abdomen
35	Problem areas
37	Outer thighs
43	Under eyes
45	Any area with appropriate fat deposit
47	Abdomen, arms thighs
50	Arms, lower abdomen
54	Jowl
61	Breasts, abdomen
62	Abdomen, thighs, localized fatty bulges

## Appendix II.

### ATX-101

ATX-101 is a potential first-in-class injectable drug candidate under clinical investigation for the reduction of submental fat. ATX-101 is a proprietary formulation of synthetic sodium deoxycholate, a well-characterized component of human bile that is naturally occurring in the body and promotes the breakdown of dietary fat. ATX-101 is designed to be a locally-injected drug that causes proximal, preferential destruction of adipocytes, or fat cells, with minimal effect on surrounding tissue.

In a Phase III trial conducted in Europe, patients with moderate or severe submental fat

- Received one of two dosing regimens (1 mg/cm<sup>2</sup> or 2 mg/cm<sup>2</sup>) or placebo.
- Administered monthly into the submental fat area for up to four treatment visits.
- Clinician assessments and caliper measurements were performed at all treatment visits and 12 weeks after the last treatment visit (week 24).
- Subject self-assessments were performed at baseline and 12 weeks after the last treatment visit (week 24).

The trial met its pre-specified primary endpoints based on clinician and patient assessments. At the 2 mg/cm<sup>2</sup> dose, ATX-101 resulted in a statistically significant reduction of submental fat, relative to placebo, as measured using a

- 5-point Clinician-Reported Submental Fat Rating Scale (CR-SMFRS) (mean of 0.77 vs. 0.36;  $p < 0.0001$ , week 24).
- 7-point Subject Self Rating Scale (SSRS) (64.8% vs. 29.3%;  $p < 0.001$ , week 24).
- Calipers as an objective measure ( $p < 0.05$ , week 24).

Adverse events were mostly mild to moderate, and were transient. The most common adverse events were pain, swelling, numbness, bruising and redness. These adverse events were limited to the injection site; most were temporally associated with treatment. No systemic treatment-related adverse events were reported. Patient withdrawal from treatment due to adverse events was less than 10%. We note Phase III trials being conducted in the US, patients may receive up to six treatments at 28-day intervals.

This 36-year-old female entered the Phase III trial with her baseline submental fat rated as grade 2 (moderate) on both the clinician-rated (CR-SMFRS) 5-point scale and patient-rated (PR-SMFRS) 5-point scale. By the end of study at week 24, she achieved a 1-grade reduction in submental fat according to the CR-SMFRS, a 2-grade reduction according to the PR-SMFRS, and a 3-point improvement in satisfaction with the appearance of her face and chin (SSRS).



Source: Company Reports

## Kythera - Quarterly Income Statement Analysis 2011-2025E

(\$ in Millions, Except EPS)																
(Year Ended December 31)	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	CAGR 17-25
ATX-101	0.0	0.0	0.0	0.0	12.0	100.8	264.8	351.0	421.5	466.0	500.1	511.9	518.7	511.3	496.4	8%
ATX-101 Bayer Royalty	0.0	0.0	0.0	1.1	6.9	17.4	33.6	36.4	37.0	37.0	35.2	33.0	30.1	27.0	24.4	-4%
<b>Total Revenue</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.1</b>	<b>18.8</b>	<b>118.1</b>	<b>298.4</b>	<b>387.3</b>	<b>458.5</b>	<b>503.0</b>	<b>535.3</b>	<b>544.9</b>	<b>548.7</b>	<b>538.3</b>	<b>520.8</b>	<b>7%</b>
Sublicense Expense	1.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
COGS	0.0	0.0	0.0	0.0	1.4	18.6	49.0	64.9	78.0	86.2	92.5	94.7	96.0	94.6	91.8	8%
% of Sales	NM	NM	NM	0.0%	7.2%	15.8%	16.4%	16.8%	17.0%	17.1%	17.3%	17.4%	17.5%	17.6%	17.6%	1%
Gross Profit	(1.2)	(2.0)	0.0	1.1	17.5	99.5	249.4	322.4	380.5	416.8	442.8	450.2	452.8	443.7	429.0	7%
% of Sales	NM	NM	NM	NM	NM	84.2%	83.6%	83.2%	83.0%	82.9%	82.7%	82.6%	82.5%	82.4%	82.4%	0%
R&D	15.8	36.0	40.0	35.0	35.0	35.0	36.0	38.7	45.8	50.3	53.5	54.5	54.9	53.8	52.1	5%
% of Sales	NM	NM	NM	NM	NM	29.6%	12.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	-2%
SG&A	6.9	10.7	13.0	17.0	43.0	70.0	119.4	139.4	146.7	161.0	163.3	163.5	164.6	161.5	156.2	3%
% of Sales	NM	NM	NM	NM	NM	59.3%	40.0%	36.0%	32.0%	32.0%	30.5%	30.0%	30.0%	30.0%	30.0%	-4%
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
<b>Operating Income</b>	<b>(23.8)</b>	<b>(48.6)</b>	<b>(53.0)</b>	<b>(50.9)</b>	<b>(60.5)</b>	<b>(5.5)</b>	<b>94.1</b>	<b>144.2</b>	<b>187.9</b>	<b>205.5</b>	<b>226.0</b>	<b>232.3</b>	<b>233.3</b>	<b>228.4</b>	<b>220.6</b>	<b>11%</b>
% of Sales	NM	NM	NM	NM	NM	-4.7%	31.5%	37.2%	41.0%	40.9%	42.2%	42.6%	42.5%	42.4%	42.4%	4%
Interest Income	0.0	0.2	0.5	0.2	0.7	0.3	0.1	0.1	0.4	0.9	1.5	2.1	2.9	3.6	4.4	NM
Warrant and Other Interest Exp/Inc, Net	(0.3)	(0.8)	(0.4)	(0.4)	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
Other Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NM
<b>Non-Operating Items</b>	<b>(0.3)</b>	<b>(0.7)</b>	<b>0.0</b>	<b>(0.2)</b>	<b>0.5</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.4</b>	<b>0.9</b>	<b>1.5</b>	<b>2.1</b>	<b>2.9</b>	<b>3.6</b>	<b>4.4</b>	<b>NM</b>
Pre-tax Income	(24.1)	(49.4)	(53.0)	(51.1)	(60.0)	(5.2)	94.2	144.3	188.4	206.4	227.5	234.4	236.2	232.0	225.0	12%
% of Sales	NM	NM	NM	NM	NM	-4.4%	31.6%	37.3%	41.1%	41.0%	42.5%	43.0%	43.0%	43.1%	43.2%	4%
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.0%	28.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	3%
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	26.4	40.4	65.9	72.2	79.6	82.0	82.7	81.2	78.8	15%
<b>Net Income</b>	<b>(24.1)</b>	<b>(49.4)</b>	<b>(53.0)</b>	<b>(51.1)</b>	<b>(60.0)</b>	<b>(5.2)</b>	<b>67.8</b>	<b>103.9</b>	<b>122.4</b>	<b>134.2</b>	<b>147.9</b>	<b>152.3</b>	<b>153.5</b>	<b>150.8</b>	<b>146.3</b>	<b>10%</b>
% of Sales	NM	NM	NM	NM	NM	-4.4%	22.7%	26.8%	26.7%	26.7%	27.6%	28.0%	28.0%	28.0%	28.1%	3%
Average Shares Outstanding	11.1	14.9	21.6	25.6	26.6	27.6	28.6	28.6	28.7	28.7	28.8	28.8	28.9	28.9	29.0	0%
<b>Operating EPS</b>	<b>(\$2.17)</b>	<b>(\$3.32)</b>	<b>(\$2.46)</b>	<b>(\$2.00)</b>	<b>(\$2.26)</b>	<b>(\$0.19)</b>	<b>\$2.37</b>	<b>\$3.63</b>	<b>\$4.27</b>	<b>\$4.67</b>	<b>\$5.14</b>	<b>\$5.29</b>	<b>\$5.32</b>	<b>\$5.22</b>	<b>\$5.05</b>	<b>10%</b>

Source: Leerink Swann and Company Reports

% Change	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
<b>Total Revenue</b>		NM	NM	NM	1549.3%	527.4%	152.6%	29.8%	18.4%	9.7%	6.4%	1.8%	0.7%	-1.9%	-3.2%
Sublicense Expense		65.7%	-100.0%	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
COGS		NM	NM	NM	NM	1266.5%	162.7%	32.6%	20.1%	10.5%	7.3%	2.4%	1.3%	-1.4%	-2.9%
Gross Profit		65.7%	-100.0%	NM	1429.8%	469.7%	150.7%	29.3%	18.0%	9.5%	6.2%	1.7%	0.6%	-2.0%	-3.3%
R&D		128.3%	11.1%	-12.5%	0.0%	0.0%	2.9%	7.6%	18.4%	9.7%	6.4%	1.8%	0.7%	-1.9%	-3.2%
SG&A		55.5%	21.5%	30.8%	152.9%	62.8%	70.5%	16.8%	5.2%	9.7%	1.4%	0.1%	0.7%	-1.9%	-3.2%
Others		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
<b>Operating Income</b>		104.1%	9.0%	-4.0%	19.0%	-90.9%	-1808.9%	53.3%	30.3%	9.4%	10.0%	2.8%	0.4%	-2.1%	-3.4%
<b>Non-Operating Items</b>		141.2%	-106.3%	-554.0%	-351.2%	-35.6%	-71.2%	9.3%	301.9%	106.7%	64.6%	45.5%	34.6%	26.3%	21.3%
Pre-tax Income		104.5%	7.3%	-3.6%	17.5%	-91.4%	-1922.9%	53.3%	30.5%	9.6%	10.2%	3.0%	0.8%	-1.8%	-3.0%
Tax Rate		NM	NM	NM	NM	NM	NM	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taxes		NM	NM	NM	NM	NM	NM	53.3%	63.1%	9.6%	10.2%	3.0%	0.8%	-1.8%	-3.0%
<b>Net Income</b>		104.5%	7.3%	-3.6%	17.5%	-91.4%	-1412.5%	53.3%	17.8%	9.6%	10.2%	3.0%	0.8%	-1.8%	-3.0%
Average Shares Outstanding		33.2%	45.2%	18.5%	3.9%	3.8%	3.6%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
<b>Operating EPS</b>		53.5%	-26.1%	-18.7%	13.1%	-91.7%	-1366.5%	53.0%	17.6%	9.4%	10.0%	2.9%	0.6%	-1.9%	-3.2%

Source: Leerink Swann and Company Reports

(Year Ended December 31)	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Credit Facility \$15MM															
Senior Loan \$5MM - 8/1/12 to 12/31/21		5.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Rate		11.5%	8.5%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Expense		0.24	0.44	0.43	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



## Disclosures Appendix

### Analyst Certification

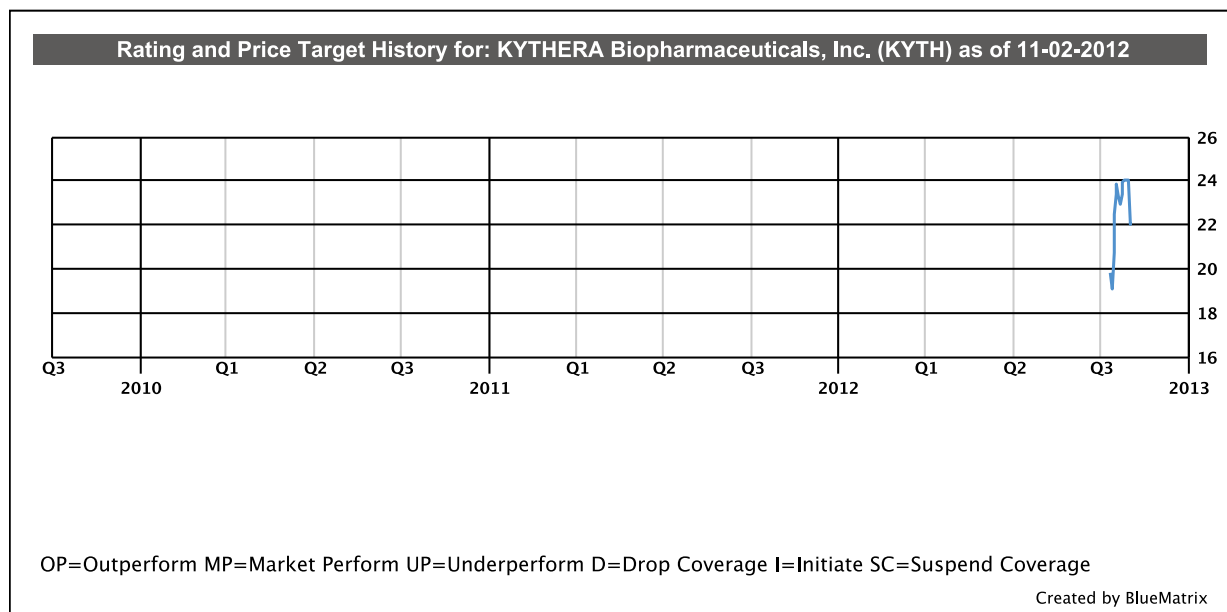
I, Seamus Fernandez, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

### Valuation

We value KYTH shares at \$28/share based on our DCF valuation which calculates cash flows through 2025, applies a 12% discount rate and assume a 0% growth rate on the terminal value of KYTH cash flow in 2025.

### Risks to Valuation

Key risks/uncertainties are: (1) economic sensitivity of self-pay products; (2) regulatory risk; (3) a slower-than-expected launch of ATX-101 in North American and European markets; and (3) disappointing North American Phase III data for ATX-101.





### Rating and Price Target History for: Allergan, Inc. (AGN) as of 11-02-2012



Leerink Swann placed an Outperform rating on AGN on June 12, 2006.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix

### Rating and Price Target History for: Medicis Pharmaceutical Corp. (MRX) as of 11-02-2012



Leerink Swann placed a Market Perform rating on MRX on November 8, 2006.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix



## Rating and Price Target History for: Sanofi (SAN FP) as of 11-02-2012



OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix



Distribution of Ratings/Investment Banking Services (IB) as of 09/30/12				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	102	58.30	29	28.40
HOLD [MP]	73	41.70	3	4.10
SELL [UP]	0	0.00	0	0.00

## Explanation of Ratings

**Outperform (Buy):** We expect this stock to outperform its benchmark over the next 12 months.

**Market Perform (Hold/Neutral):** We expect this stock to perform in line with its benchmark over the next 12 months.

**Underperform (Sell):** We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

From October 1, 2006 through January 8, 2009, the relevant benchmarks for the above definitions were the Russell 2000® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

Definitions of Leerink Swann Ratings prior to October 1, 2006 are shown below:

**Outperform (Buy):** We expect this stock to outperform its benchmark by more than 10 percentage points over the next 12 months.

**Market Perform (Hold/Neutral):** We expect this stock to perform within a range of plus or minus 10 percentage points of its benchmark over the next 12 months.

**Underperform (Sell):** We expect this stock to underperform its benchmark by more than 10 percentage points over the next 12 months.

For the purposes of these definitions, the relevant benchmark were the Russell 2000® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Index for issuers with a market capitalization over \$2 billion.





## Important Disclosures

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Leerink Swann Consulting LLC, an affiliate of Leerink Swann LLC, is a provider of evidence-based strategy and consulting to the healthcare industry.

In the past 12 months, the Firm has received compensation for providing investment banking services to KYTHERA Biopharmaceuticals, Inc.

Leerink Swann LLC makes a market in KYTHERA Biopharmaceuticals, Inc.

Leerink Swann LLC is willing to sell to, or buy from, clients the common stock of Allergan, Inc., Medicis Pharmaceutical Corp. and Sanofi on a principal basis.

In the past 12 months, an affiliate of the Firm, Leerink Swann Consulting LLC, has received compensation for providing non-securities services to: Allergan, Inc.

Leerink Swann LLC has acted as the manager for a public offering of KYTHERA Biopharmaceuticals, Inc. in the past 12 months.

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