# PiperJaffray.

## **Argos Therapeutics (ARGS)**

## Overweight

## New Start For Class Leading Active Immunotherapy, Initiating With OW

#### CONCLUSION

We are initiating coverage on Argos Therapeutics with an Overweight rating and an \$18 price target. Our valuation is largely based on the company's lead dendritic-cell vaccine for treating metastatic renal cell carcinoma (mRCC), AGS-003 ('003), and a placemarker value for the underlying Arcelis platform (\$100M, ~\$5/share). AGS-003 is currently in Phase III with enrollment expected to complete by YE14. Additionally, the Arcelis technology platform should have broad potential as it uses patient-tumor specific antigens to drive anti-cancer T-cell responses; however, we await the mRCC results prior to explicitly considering other indications in our valuation. In earlier studies in mRCC, '003 produced significant improvements in survival, however, patient numbers were limited. Beyond oncology, Argos has programs in infectious disease using the same technology (Exhibit 1), and the company has two ongoing Phase II studies in HIV.

- AGS-003. '003, Argos' lead candidate in oncology, has successfully completed Phase II demonstrating a median overall survival (mOS) of 30.2 months in 21 patients when used with Sutent. Although the '003 study was a small single arm study, we believe renal cancer prognosis is well characterized and independent analyses of several cohorts for Sutent with fewer poor risk patients suggests a mOS benchmark of 14.7 months. The ongoing Phase III includes Sutent and we believe has been designed in a way that optimizes the likelihood of success for '003. The study is being conducted with an SPA from the FDA and the program has fast track status.
- Remainder of pipeline not explicitly in our valuation, for now. We would like to see more data and a clearer path to market for the infectious disease candidate for HIV, AGS-004. That said, positive data should serve as additional validation of the technology platform. Additionally, we anticipate the company will pursue oncology indications beyond the current mRCC lead that demonstrate potential breadth of Arcelis's utility and insight on mechanistic rationale (NSCLC, early stage RCC, possibly H&N cancers).

#### RISKS TO ACHIEVEMENT OF PRICE TARGET

Failure of AGS-003 in mRCC Phase III or other studies.

#### **COMPANY DESCRIPTION**

Argos Therapeutics develops dendritic cell vaccines for oncology and infectious diseases.

#### PRICE: US\$11.00 TARGET: US\$18.00

DCF of AGS-003 in metastatic renal cell carcinoma in the U.S. + a technology/pipeline value of ~\$5/share

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Changes	Previous	Current
Rating		Overweight
Price Tgt		US\$18.00
FY14E Rev (mil)	_	US\$8.0
FY15E Rev (mil)	_	US\$o.o
FY14E EPS	_	US\$(1.61)
FY15E EPS	_	US\$(2.09)
52-Week High / Low	US\$11	.53 / US\$7.97
Shares Out (mil)		19.9
Market Cap. (mil)		US\$218.9
Book Value/Share		US\$4.50
Net Cash Per Share		US\$5.10
Debt to Total Capital		0%
Div (ann)		NA
Fiscal Year End		Dec



YEAR	REVENUE (US\$ m)							EARNINGS PER SHARE (US\$)								
YEAR	Mar	Jun	Sep	Dec	FY	FY RM	Mar	Jun	Sep	Dec	FY	FY P/E				
2013E	_	_	_	1.7	6.4	34.2X	_	_	_	(3.14)	(20.94)	NM				
2014E	2.0	2.0	2.0	2.0	8.0	27.4X	(0.40)	(0.40)	(0.40)	(0.40)	(1.61)	NM				
2015E	_	_	_	_	0.0	NA	_	_	_	_	(2.09)	NM				

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## **ARGOS PIPELINE**

	Phase I	Phase II	Phase III
AGS-003			
1st-line mRCC (+ Sutent)			
non-clear cell RCC			
RCC (adjuvant/neoadjuvant)			
Various advanced solid tumors			
AGS-004			
adult HIV			
adult HIV + vorinostat			
pediatric HIV			

Source: Company reports, Piper Jaffray

## Exhibit 2

## ARGOS EXPECTED CATALYSTS

Update on long-term survivors from Phase II mRCC studies
Complete enrollment of 1st-line mRCC Ph III
Start Phase Ila studies in early mRCC & solid tumors
Possible interim data from Phase IIa studies
Interim futility/efficacy analyses for Phase III study
Phase III data in 1st-line mRCC
Phase Ila data in early stage mRCC and solid tumors
CROI presentations - acute infections & memory T-cells
Phase Ilb viral load data (on treatment interruption)
Updates from Phase IIa studies (adult + vorinostat, pediatric)
Construction of automated production facilities

Source: Company reports, Piper Jaffray. **Bolding** indicates high likelihood for share price impact.

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## **VALUATION AND MARKETS**

Our valuation of Argos considers only potential sales of AGS-003 ('003) in treating 1st-line mRCC in the U.S., plus a placemarker for the technology platform/pipeline. We assume that the Phase III for '003 in mRCC reads-out in 1H16, in line with company guidance, and the drug reaches market in early 2017.

#### **Company valuation**

We value Argos using an NPV methodology applied to projected revenues from '003 in mRCC in the U.S. (Exhibit 3) derived from our patient based model (Exhibit 4). Our costs assume eventual 90% gross margins, and relatively steady increases in R&D and SG&A spending as Argos expands its development and sales of the Arcelis platform and resulting products. We initially estimate Argos builds a sales force for '003 in the U.S. of approximately 25 representatives.

#### Exhibit 3

#### ARGOS NPV AND VALUATION

													Discount	
(000s \$)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	rate	NPV
U.S.AG-003 net sales	0	0	0	33,503	109,677	244,788	457,002	659,068	843,110	1,010,138	1,116,010	1,209,389	30.0%	666,339
Operating Costs	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E		
COGS	0	0	0	3,350	10,968	24,479	45,700	65,907	84,311	101,014	111,601	120,939		
R&D	24,000	24,914	27,405	28,775	30,214	31,725	33,311	34,976	36,725	38,562	40,490	42,514		
SG&A	16,000	16,609	17,440	21,799	25,069	27,576	28,955	30,403	31,923	33,519	35,195	36,955		
Fixed Operating Costs	40,000	41,523	44,844	53,925	66,251	83,780	107,966	131,286	152,959	173,094	187,286	200,408	20.0%	401,707

(000s \$)         Per Share (\$)           AG-003 (U.S. only)         666,339         \$ 29.80           Operating costs         (401,707)         \$ (17.97)           Terminal value         0         \$ -           Pipeline value         100,000         \$ 4.47           Cash (YE14 est)         74,864         \$ 3.35           Long-term debt (YE14 est)         (29,000)         \$ (1.30)		NPV		NPV
Operating costs         (401,707)         \$ (17.97)           Terminal value         0         \$ -           Pipeline value         100,000         \$ 4.47           Cash (YE14 est)         74,864         \$ 3.35           Long-term debt (YE14 est)         (29,000)         \$ (1.30)		(000s \$)	Pe	r Share (\$)
Terminal value         0         \$         -           Pipeline value         100,000         \$         4.47           Cash (YE14 est)         74,864         \$         3.35           Long-term debt (YE14 est)         (29,000)         \$         (1.30)	AG-003 (U.S. only)	666,339	\$	29.80
Pipeline value         100,000         \$         4.47           Cash (YE14 est)         74,864         \$         3.35           Long-term debt (YE14 est)         (29,000)         \$         (1.30)	Operating costs	(401,707)	\$	(17.97)
Cash (YE14 est)       74,864 \$ 3.35         Long-term debt (YE14 est)       (29,000) \$ (1.30)	Terminal value	0	\$	-
Long-term debt (YE14 est) (29,000) \$ (1.30)	Pipeline value	100,000	\$	4.47
	Cash (YE14 est)	74,864	\$	3.35
	Long-term debt (YE14 est)	(29,000)	\$	(1.30)
Total NPV 410,496 \$ 18.36	Total NPV	410,496	\$	18.36

fully diluted shares (000s) 22,359 (includes all warrants, options, restricted shares, etc. and assumes dilutive exercise)

Source: Piper Jaffray

We discount estimated '003 revenues by 30% annually to YE14 and apply no terminal value beyond the expiry of a Arcelis composition of matter patent issued in the U.S. that expires in 2025, which we expect will provide adequate protection for the technology. Argos owns or licenses 12 issued and 9 pending U.S. patents covering Arcelis technology and/or candidates. Another layer of protection that we believe is as strong as or possibly stronger than the patent protection is simply the need for a potential competitor to conduct a full clinical development program after recreating and validating the core technology as well as

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establishing manufacturing capabilities. Additionally, we expect '003 will qualify for 12 years of biologics exclusivity following its approval; however, this FDA guideline, in our view, has not been well established and may be challenged and/or modified. We apply a 20% discount rate to projected expenses. This results in a NPV for Argos of \$297M plus the \$100M pipeline value. We divide by approximately 22M estimated post-IPO fully diluted shares (20M common shares plus 2M options and 0.5M warrants to derive our \$18 price target for Argos.

#### Exhibit 4

## '003 METASTATIC RCC MARKET MODEL (U.S.)

	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
AGS-003														
RCC incidence U.S. (000s)	59.6	61.4	63.2	65.1	67.1	69.1	71.2	73.3	75.5	77.7	80.1	82.5	85.0	87.5
% growth (year-over-year)		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%
% clear cell	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
% metastatic	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%
mRCC incidence U.S. (000s)	15.9	16.3	16.8	17.3	17.8	18.4	18.9	19.5	20.1	20.7	21.3	21.9	22.6	23.3
AGS-003 "year 1" penetration rate	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	7.5%	15.0%	25.0%	32.0%	37.0%	40.0%	40.0%	40.0%
AGS-003 subsequent year penetration rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	10.0%	20.0%	30.0%	40.0%	50.0%	60.0%	63.8%
U.S. AGS-003 "year 1" treatments (000s)	-	-	-	-	-	0.5	1.4	2.9	5.0	6.6	7.9	8.8	9.0	9.3
% growth (year-over-year)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
U.S. AGS-003 "subsequent" treatments (000s)	-	-	-	-	-	-	0.0	0.3	1.0	2.0	3.2	4.4	5.4	5.9
Price per "year 1" treatment (000s \$)		\$ 80	\$ 84	\$ 88	\$ 93	\$ 97	\$ 102	\$ 107	\$ 113	\$ 118	\$ 124	\$ 130	\$ 137	\$ 144
Price per "subsequent" treatment (000s \$)		\$ 40	\$ 42	\$ 44	\$ 46	\$ 44	\$ 44	\$ 44	\$ 44	\$ 49	\$ 46	\$ 46	\$ 46	\$ 46
% growth (year-over-year)			5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
U.S. AGS-003 wholesale sales (mn\$)	-	-	-	-	-	45	146	326	609	879	1,124	1,347	1,488	1,613
% growth (year-over-year)			na	na	na	na	na	na	na	na	na	na	na	na
gross-to-net, other adjustments	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Net AGS-003 sales (000s \$)	0	0	0	0	0	34	110	245	457	659	843	1,010	1,116	1,209

Source: Piper Jaffray

## mRCC model

We assume ~60k cases of renal cell carcinoma were diagnosed in the U.S. in 2012, which we increase by 3% annually based on data from Cancer Facts and Figures 2012 from the American Cancer Society (ACS). We assume 70% are clear cell (Kidney Cancer Association) and 38% of those are metastatic (ACS). We conservatively project sales through 2025 based on a composition of matter patent for Arcelis that expires that year, though we believe that the clinical data and manufacturing know-how will likely provide a significant barrier to entry beyond that point. Though the labels of the 1st-line tyrosine kinase inhibitors (TKIs) for mRCC (which are Votrient, Sutent, and Nexavar) don't restrict use to clear cell mRCC, the ADAPT Phase III of '003 is enrolling patients with primarily clear cell histology. To this patient population (clear cell mRCC) we project that '003 is used in 2.5% of patients in 2017 and reaches peak penetration of 40%. We also apply a penetration rate for subsequent treatments for the patients who undergo the first year treatment. Our pricing estimate for '003 (year 1) is derived roughly from the launch price of Provenge at ~\$90k/treatment. We increase the price projections by 5% annually. We apply a 25% discount to gross sales in order to factor in rebates and adjustments, and royalties and milestones owed by Argos, to arrive at our net sales projections for '003.

#### **Relative Valuation**

A comparison of enterprise values of companies we feel are similar in many ways to Argos is shown in Exhibit 5. For the most part these are development stage companies with differentiated vaccine platforms. Dendreon, with its approved Provenge, and Sangamo, with marketed products by way of its industrial partnerships with Sigma Aldrich and Dow AgroSciences, are exceptions. This valuation suggests that Argos may be trading at a discount relative to a basket of its peers.

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#### **RELATIVE VALUE COMPARISON**

Company Name	Ticker	Price/share	Shares	Market Cap	Cash	Debt	EV
Novavax Inc	NVAX	\$6.30	208.5	1314	147	2	1169
Sangamo BioSciences Inc	SGMO	\$18.25	62.7	1145	93	0	1052
NewLink	NLNK	\$39.08	25.7	1005	52	7	960
Dendreon Corp	DNDN	\$3.31	157.5	521	167	567	922
Inovio Pharmaceuticals Inc	INO	\$3.55	226.6	804	46	0	758
Geron Corp	GERN	\$4.63	151.4	701	67	0	634
ZIOPHARM Oncology Inc	ZIOP	\$4.21	100.0	421	24	0	397
bluebird bio Inc	BLUE	\$24.47	23.8	582	217	0	365
Agenus Inc	AGEN	\$4.84	54.6	264	30	6	240
Oncothyreon Inc	ONTY	\$3.17	69.3	220	63	0	156
Vical Inc	VICL	\$1.53	86.8	133	53	0	79
	Median			582			634
	Mean			646			612
Argos	ARGS	\$11.00	19.0	210	112	29	127
		EV-implied					
		price/share					
Argos - at group median	ARGS	\$33.29	19.0	717	112	29	634
Argos - at group mean	ARGS	\$32.13	19.0	695	112	29	612

Source: Thomson Reuters, Piper Jaffray, 3/3/2014 close pricing

#### **Partnering**

Argos has partnerships with Pharmstandard International in Russia and the Commonwealth of Independent States (CIS) and with Green Cross in Korea for '003. Pharmastandard will build and manage an automated manufacturing facility for '003 in its region. The company also has licensed '003 to Medinet for manufacture for use in Japan for mRCC as well as an option for Medinet to market '003 for mRCC in Japan. Argos continues to seek a partner for China and may retain ownership in Europe, based on our diligence. For '004, the company intends to seek a global partnership, possibly following the Phase IIb data expected in 2Q14. The partnership with Pharmastandard provides Argos with low single digit royalties on net sales of '003 up to an undisclosed sales threshold, beyond which the royalties increase to low double digits (below 20%). The Green Cross deal also carries tiered royalties from low single digits to sub-20% low double digit. Medinet is currently a manufacturing agreement with developmental, regulatory and sales milestones of up to \$14M, and carries an option that would provide royalties on sales if exercised.

#### Current mRCC Treatments

Metastatic renal cell carcinoma (mRCC) is currently most often treated with two classes of targeted agents in the U.S. following surgery and relapse or for unresectable disease: 1. Inhibitors of tyrosine kinase receptors such as the VEGFR and PDGFR (TKIs) or 2. Inhibitors of the mammalian target of rapamycin (mTor) pathway. The approved TKIs for 1<sup>st</sup>-line mRCC include Sutent (sunitinib), which inhibits VEGFRs, PDGFRs, c-Kit, c-Fms, and Ret; Nexavar (sorafenib), which inhibits PDGFR-beta and Raf kinases; and Votrient (pazopanib), which inhibits PDGFRs, FGFRs, c-Kit, and c-Fms. The monoclonal antibody Avastin (bevacizumab), which targets VEGF-A (a ligand for the VEGFRs), is also approved for 1<sup>st</sup>-line mRCC. The TKI Inlyta (axitinib), targeting VEGFRs, is approved for 2<sup>nd</sup>-line

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use. Two mTor (an intracellular kinase) inhibitors are approved for mRCC, Torisel (temsirolimus) for 1<sup>st</sup>-line use and Afinitor (everolimus) for use with tumors resistant to Sutent or Nexavar.

## Other Paths of Investigation in RCC

There are a large number of ongoing studies to treat mRCC including novel targeted agents, such as cabozantinib, and combinations and sequences of approved agents.

Immunotherapy is an attractive and active area of investigation for RCC in part because IL-2 can effectively cure the disease in certain cases; however, the treatment can be highly toxic. Additionally, the targeted therapies rarely produce complete responses and the cancer often becomes resistant. The most active areas of investigation for immunotherapy, we believe, are inhibition of checkpoint pathways (PD-1, PD-1L, CTLA-4), vaccine-based approaches, and dendritic cell activation through TLR agonists. The anti-PD-1 antibody Nivolumab produced response rates of 29% in a Phase I study of 1<sup>st</sup>-line mRCC. Further studies will look at Nivolumab as a single-agent for 2<sup>nd</sup> or 3<sup>rd</sup> line mRCC vs. Afinitor and in combination with Ipilumumab. Vaccine type approaches include, of course, Argos's '003. Other attempts are Immatics' IMA-901, which takes a set of tumor-associated peptides (not-patient specific), plus Sutent in a pivotal Phase III in mRCC vs. Sutent alone. This study is looking at favorable and intermediate risk patients vs. the poor and intermediate risk patients Argos is examining.

Recent notable failures in treating RCC include the FGFR inhbiting TKI dovitinib in 3<sup>rd</sup>-line mRCC and VEGFR inhibiting tivozanib, both of which went against sorafenib in pivotal testing. A vaccine approach (Agenus's Oncophage) attempted to isolate tumor specific heat shock proteins and link them with tumor specific antigen peptides. The FDA and EMA did not approve Oncophage based on its Phase III data, however it is approved in Russia. These results highlight the significant clinical and regulatory development risk in mRCC, we believe.

## ARCELIS DEVELOPMENT AND BACKGROUND

#### **Arcelis Platform**

The Arcelis platform consists of the patient's monocytes isolated from a leukaphersis procedure, which are subsequently cultured in a way to derive dendritic cells (DCs). DCs are so-called professional antigen presenting cells that provide target antigens to T-cells in the lymph nodes in order to induce an active immune response. Following their differentiation to DCs, the cells are "loaded," or primed, with RNA amplified from the patient's tumor or infectious virus. The RNA provides the target-antigen-sequence to the DC so that it can be presented to the T-cells. In this way, Arcelis is able to produce a T-cell response against the tumor or virus, as the case may be.

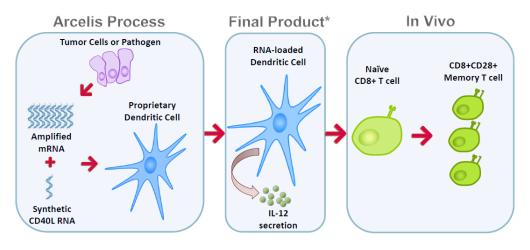
The isolated cells are stable for four days following leukaphersis, allowing Argos to supply the North American market with a single manufacturing site. Arcelis consists of two key components, in our view, that differentiate the technology from other dendritic cell vaccines: 1. The use of patient-specific tumor or virus RNA to prime the patient's dendritic cells and, 2. The inclusion of CD40L mRNA that induces IL-12 expression by the dendritic cell, thereby allowing effective memory T-cell generation as IL-12 is an essential cytokine in the T-cell induction process. Arcelis DCs are delivered by intradermal injection whereby the

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traffic to the lymph nodes to come in contact with the T-cells. The Arcelis technology is derived from Nobel Prize-winning (2011) work from Dr. Ralph Steinman that elucidated the nature and role of dendritic cells.

#### Exhibit 6

#### ARCELIS TECHNOLOGY SUMMARY



Source: Company reports.

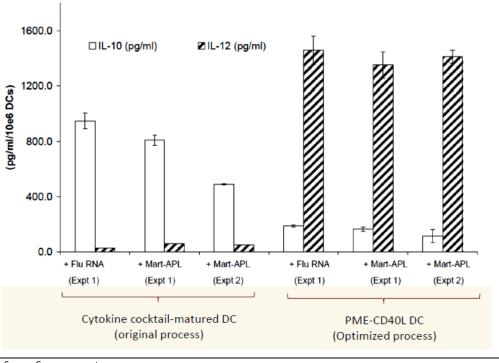
Arcelis is able to induce CD8+, CD28+ memory T-cells (due to the included CD40L RNA) without involvement of CD4+ T-cells. This may be important particularly for the HIV study as those patients frequently have low CD4+ cell counts. There is also evidence that tumors produce T-cell suppressive signals. In all testing to date, Arcelis' safety and tolerability profile has been very good, as might be anticipated of an autologous cell therapy. No grade 3 or 4 adverse events related to '003 have been observed, with grade 1 injection site reactions, transient flu-like symptoms, and soreness in the lymph nodes being the most frequently observed AEs due to '003.

Argos's technology is different from the approved dendritic cell vaccine, Provenge (Dendreon), in a number of ways. The procedure for creating Provenge doesn't produce pure dendritic cells. Provenge is directed against a specific antigen, PSA, and doesn't use patient-specific antigen sequences. Provenge requires delivery to the patient within about 36 hours from leukapheresis whereas Arcelis is frozen, enabling ~5 years worth of doses from a single leukapheresis.

The early version of Argos's Arcelis technology (MB-002 for mRCC) didn't include CD40L mRNA. The addition of CD40L is important to enhancing IL-12 expression from DCs following antigen priming (cross-hatched bars in Exhibit 7, Mart-APL is a melanoma antigen).

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#### IL-12 EXPRESSION INDUCED BY CD40L



Source: Company reports

MB-002 was studied as a single agent in a Phase I/II study that enrolled 15 intermediate risk (Memorial Sloan Kettering Cancer Center model) and 5 poor risk patients. Ten patients achieved stable disease and 5 survived 30 months or more, with one surviving 7.8 years and another at least 8 years; however, OS wasn't an endpoint so the majority of patients were not followed up for survival. Development of MB-002 was halted due to insufficient levels of induced IFN-gamma, though patients did experience restored levels of IL-2, and Argos focused on the '003 product candidate.

## Manufacturing

A key component to Argos's plans for Arcelis is manufacturing, which the company intends to largely automate prior to a launch of '003 for mRCC. Automation is likely to reduce the risk for contamination and delays in manufacturing, in our view, and may help optimize the regulatory process and eventual launch of '003. Argos needs to build, validate (cGMP and cGTP: current good tissue practices), and demonstrate consistency and comparability with the current Arcelis procedures using the automated methods.

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## **DC Vaccines**

Other somewhat related approaches that could conceivably compete with Arcelis but aren't currently being investigated in RCC or HIV, to our knowledge, include: NewLink's HyperAcute platform, which expresses a glycoprotein from bacteria in a tumor cell line (not patient specific) to create a vaccine. It is not currently being investigated in RCC to our knowledge. Ziopharm is expressing IL-12 to induce an anti-tumor effect using adenoviruses that are directly injected into the tumor or with dendritic cells that have been transduced with the IL-12-adenovirus before being returned to the patient. Ziopharm's adenovirus studies are being conducted in melanoma, breast cancer, and glioblastoma, with the most advanced being the melanoma Phase II.

Attempts at creating dendritic cell (DC) vaccines generally use a similar approach: isolation of monocytes from the patient, differentiation to DCs using growth factors or other means in cell culture, introduction of the relevant target antigens (as RNA, tumor lysates, or peptides/proteins), return of the DCs to the patient. There have been two approved DC vaccines; the earliest is a "vaccine" produced by extracorporeal photoimmunotherapy (ECP) that was developed prior the identification of dendritic cells themselves. This approach isolates white blood cells and exposes them to a UV-activated cytotoxin before returning them to the patient. ECP was approved for cutaneous T-cell lymphoma (CTCL) by the FDA in 1998. The technique is also applied to treat graft vs. host disease and during transplants. More recent studies have examined the use of this protocol along with antigen loading of DCs. We believe the approach is still undergoing investigation and optimization in laboratories, but we are not aware of ongoing studies in a specific cancer indication.

The other approved DC vaccine is Dendreon's Provenge (sipuleucel-T). Provenge is based on work from Dr. Edgar Engleman at Stanford University. Provenge is created from isolated antigen presenting cells (APCs) that are cultured with a fusion protein of prostatic acid phosphatase (PAP), found in ~95% of prostate cancers, and granulocyte-macrophage colony stimulating factor (GM-CSF), important for DC survival. Provenge was approved in 2010 for asymptomatic or minimally symptomatic metastatic castrate resistant (hormone refractory) prostate cancer based on a survival advantage in two independent studies. Dendreon is working on defining biomarkers (baseline and on-therapy) that might indicate response to Provenge.

Northwest Biotherapeutics has a dendritic cell vaccine, DCVax, which uses patient specific dendritic cells as well as patient specific tumor antigens. DCVax is being investigated in a 312-patient Phase III for glioblastoma in the U.S. and Europe (DCVax-L vaccine) and a 60-patient Phase I/II study in inoperable solid tumors including prostate cancer with the DCVax-Direct. The DCVax-Direct is injected directly into tumors while DCVax-L is injected intradermally in the arm.

Immunocellular Therapeutics (IMUC) is attempting to target cancer stem cells (CSCs) using its DC vaccine platform. The company has conducted studies in glioblastoma (GBM). IMUC uses CSC-derived peptides to target the DCs and induces increased IL-12 expression from the DCs. Two candidates, ICT-107 and ICT-121, have been investigated in GBM. ICT-107 was designed to target 6 GBM CSC antigens and produced a survival advantage in a 19 patient Phase I. The agent failed to meet the overall survival endpoint in a Phase II study in 124 patients while producing a significant improvement in progression free survival, as reported in December 2013. IMUC is considering a Phase III and will meet with the FDA to discus next steps. ICT-121 targets the surface marker CD-133 and has recently started Phase I testing.

Activartis Biotech (Austria) is also developing DC vaccines designed to produce IL-12. The company believes that stopping DC maturation at six hours allows optimal IL-12

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production while also allowing the cells to be frozen. The company also states that DCs covert to an IL-12 non-secreting and immune suppressive state approximately 24 hours following exposure to a stimulatory signal. Activartis's lead candidate AV0113 is in Phase II testing in GBM, with enrollment of 78 patients recently concluded. AV0113 received Orphan Status from the FDA in July 2013.

PrimaBioMed (Australia) is investigating DC vaccine CVac in ovarian cancer, currently in Phase II testing. The target antigen is mannosylated Muc1 protein which is used to induce the patient's DCs (created from monocytes treated with GM-CSF and IL-4), which are then returned to the patient by intradermal injection. The Phase II demonstrated no difference in PFS between groups; survival data may be available in late 2014.

An academic group at Vrje Universiteit Brussel is developing an approach to DC vaccines using mRNA delivered antigen (similar to the approach taken by Argos) for treating melanoma. The group is also introducing mRNAs for CD40L (similar again to Argos) and CD70 and TLR4. They have conducted a Phase Ib and a Phase II (with ipilumumab) with the TriMix-melanoma vaccine. Patients in both studies achieved a 50% rate of stable disease and 30% had complete or partial responses. Ipilumumab didn't appear to improve outcomes. An ongoing study will examine TriMix-melanoma just following surgery.

Phase III in mRCC (ADAPT)

Argos's ongoing Phase III study of '003 plus Sutent (sunitinib) vs. Sutent alone to treat mRCC, the ADAPT study, is being conducted under a Special Protocol Assessment (SPA) from the FDA. The study began enrolling in January 2013 and Argos is targeting enrolling 450 patients at ~140 sites in the U.S., Europe and Israel by YE14. The primary endpoint is median overall survival (mOS) and the study is seeking a 6 month improvement, which would give a hazard ratio of ~0.7 and p-value ≤ 0.05 based on control arm assumptions of ~15 months mOS. We believe that this level of efficacy should be sufficient to allow approval by the FDA with this single pivotal study. Secondary endpoints are PFS, tumor responses, and safety. The study is randomized but open label due to the requirement for leukapheresis for the Arcelis procedure. Patients are randomized 2-to-1 to the '003 + Sutent arm vs. Sutent alone (Exhibit 8, "Standard therapy" is 1<sup>st</sup> line treatment with Sutent with switching to alternative TKIs or temsirolimus/everolimus upon Sutent intolerance or progression). Dosing is every-3-weeks '003 for five doses, followed by every-3-months doses until progression. Sutent is dosed for four 6-week cycles (4 weeks on drug, 2 weeks off).

The ADAPT Phase III trial of '003 in 1st-line mRCC requires patients start on Sutent, and use of '003 is contraindicated with Nexavar as it inhibits the function of dendritic cells (Hipp MM, et al., Blood, 2008 Jun 15;111(12):5610-20). We do not believe this is a major issue in the conduct of ADAPT as our diligence suggests that most physicians begin treatment with Sutent (most likely simply due to more extensive clinical experience with the agent rather than any fundamental efficacy benefit relative other approved agents).

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#### ADAPT STUDY DESIGN



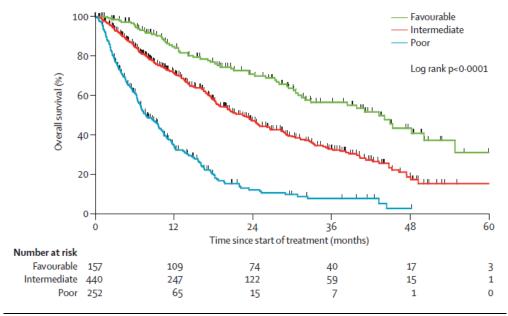
Source: Company reports.

Argos plans three interim analyses for safety and futility during 2015; at 25%, 50%, and 75% of events, prior to the top-line OS data expected 1H16.

Argos has indicated that enrollment is tracking the targeted goal of ~75% intermediate risk, 25% poor risk patients, as defined by the International Metastatic Renal-Cell Carcinoma Database Consortium prognostic model (aka "the Heng model"). Intermediate risk is defined by having one or two risk factors that consist of: 1) <1 year from diagnosis to treatment, 2) Hemoglobin levels below the lower limit of normal, 3) Blood calcium over the upper limit of normal, 4) Neutrophil counts over the upper limit of normal, and 5) Platelet counts over the upper limit of normal. Poor risk is defined as having three or more risk factors. This model has been compared to other clinical models for patients treated with 1<sup>st</sup>-line VEGFR inhibitors in Heng, et al., Lancet Oncol 2013; 14: 141–48. Median overall survival for this model by grouping was: 7.8 months in the poor risk group, 22.5 months for intermediate risk, and 43.2 months for favorable risk (Exhibit 9). All patients in ADAPT need to have at least the "<1 year from diagnosis to treatment" risk factor, but are limited to a maximum of four Heng risk factors.

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#### SURVIVAL BY HENG MODEL GROUPING



Source: Heng, et al., Lancet Oncol 2013; 14: 141-48

Patients in ADAPT are stratified by number of risk factors upon enrollment as well as measurable/non-measurable metastatsis.

#### mRCC Phase IIs

Argos's has conducted two Phase II studies of '003 in mRCC. One was a Phase II combination study with Sutent in 21 patients and another Phase I/II as monotherapy in 22 patients.

The study with Sutent (AGS-003-006) enrolled 11 intermediate risk and 10 poor risk patients (based on the Heng model criteria) at nine sites in the U.S. and Canada. All patients had the risk factor of <1 year from diagnosis to treatment. Most patients had one 6-week cycle of Sutent (4 weeks on, 2 weeks off drug) followed by '003 dosed every three weeks for up to five doses. Patients also continued to receive three additional cycles of Sutent.

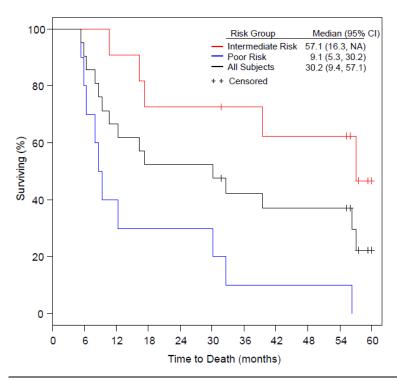
Median overall survival (mOS) for the poor risk group was 9.1 months and mOS for the intermediate group is 57.1 months and mOS for the entire population at 30.2 months (Exhibit 10). This compares favorably to the results of the Heng model validation study for 1<sup>st</sup>-line VEGFR inhibition (7.8 mos poor risk and 22.5 mos intermediate risk, as shown above in Exhibit 9). By another measure, seven patients survived more than 4.5 years, which compares favorably to a meta-analysis of 455 intermediate-to-poor risk mRCC patients treated with Sutent that found 13% of patients survived 30 months or more. However, some of those Sutent patients were 2<sup>nd</sup>-line patients.

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Median PFS was 11.2 months and eight patients had partial responses (two prior to '003 treatment however) and five stable disease.

#### Exhibit 10

## MEDIAN SURVIVAL BY HENG GROUP - AGS-003-006



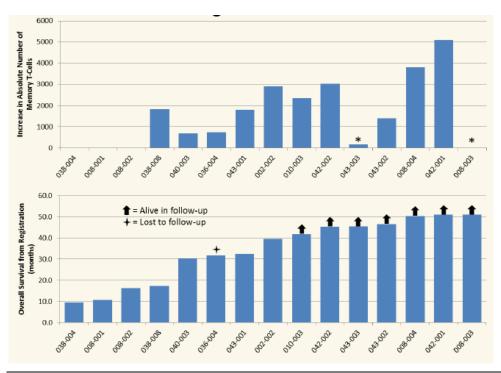
Source: Company reports

In support of the proposed mechanism of action for Arcelis and its potential role in producing superior clinical outcomes, the '003 + Sutent study demonstrated correlations between immune responses and survival (Exhibit 11, p-value  $\leq$  0.02, \* patients had abnormally high baseline memory T-cell counts), progression free survival (Exhibit 12, p-value  $\leq$  0.031), and tumor responses (Exhibit 13, p-value  $\leq$  0.045).

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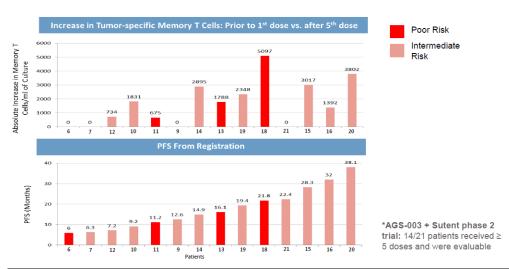
## IMMUNE RESPONSE CORRELATION WITH SURVIVAL



Source: Company reports

## Exhibit 12

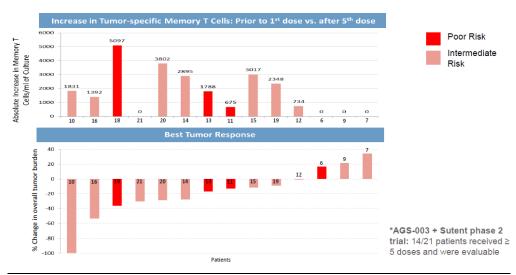
## IMMUNE RESPONSE CORRELATION WITH PFS



Source: Company reports

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#### IMMUNE RESPONSE CORRELATION WITH TUMOR RESPONSES



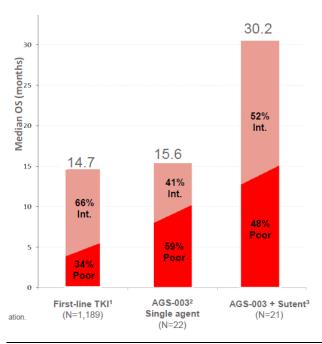
Source: Company reports

The 1<sup>st</sup>-line '003 monotherapy Phase I/II enrolled nine intermediate risk and 13 poor risk adult, non-nephrecomized mRCCpatients at six sites in the U.S. and Canada. In this study, patients were given '003 every two weeks for up to five doses, followed by four additional doses every month, and that followed by every-three-month booster dosing until disease progression. This study demonstrated a mOS of 15.6 months, which compares favorably to historical results with Sutent, despite enrolling a higher proportion of poor risk patients. Additionally, 23% of patients survived 30 or more months. Median PFS was 5.6 months and one patient achieved a partial response and seven had stable disease.

A comparison of the median survival results for these two trials and the historical 1<sup>st</sup>-line Sutent data, and breakdown of enrollment by risk group, is shown in Exhibit 14.

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## IMMUNE RESPONSE CORRELATION WITH PFS



Source: Company reports

Additional '003 Studies Argos plans to initiate multiple additional studies of '003 in 2014. These include Phase II studies in early stage RCC (2 ISTs to start in 1H14 with a total of 40-60 patients), a Phase II in 30-40 non-clear-cell mRCC patients to start in 1H14, and possibly multiple Phase II studies in various solid tumors. We believe Arcelis is likely to be broadly applicable to multiple cancers as long as a tumor sample can be obtained by surgery or biopsy and the cancers are able to be attacked by the immune system.

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# PiperJaffray.

## HIV program – (AGS-004)

We don't consider the HIV program in our valuation at this time due to a number of factors. First, we believe the potential target population is still unclear and will be refined by future studies (unlike the case with mRCC, where the target population is well defined). Second, we expect investors are primarily focused on the mRCC pivotal study, and will remain so for the next ~24 months. Third, there is no established market benchmark for cellular treatments for HIV. Fourth, vaccines for HIV have historically not worked. That said, Argos's ongoing Phase IIb should produce data around mid-'14 and this could prove to be a meaningful share catalyst if the data is strong. We see limited downside risk as we think the market is giving Argos little value for the program at this time.

Argos is developing '004 to address what antiretrovirals have not been able to achieve: eradication of the virus. The company believes this may be possible with '004 in combination with other approaches. We anticipate Argos will seek to fund development in pivotal studies and beyond through partnerships and/or grants. The company intends to seek a global partnership for commercialization should the data prove positive in Phase II.

Argos's '004 is not taking the same approach to HIV as Sangamo's SB-728-T. Sangamo's approach is attempting to make T-cells invisible to the virus, and hence that company removes, modifies and replaces T-cells. Argos applies the Arcelis technology based on dendritic cells to induce anti-HIV immune functionality more akin to a classical vaccine approach. However, both Argos and Sangamo hope to find a "functional cure" for HIV, one that addresses the viral reservoir that remains in patients on antiretroviral drugs.

## Phase IIb – (AGS-004)

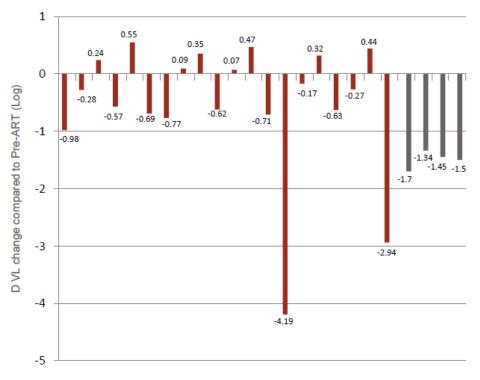
Argos's ongoing Phase IIb is fully funded by a grant from the National Institutes of Health (NIH) for \$39.3mn and data is expected in 2Q14. The study is examining 53 HIV infected patients (enrollment concluded September 2013) for a reduction in viral load (VL) at the end of a 12-week treatment interruption (TI) of the patient's antiretroviral medication. Patients are randomized 2:1 to placebo The study will also examine duration of TI and changes in CD4+ cell counts. Argos doesn't anticipate that this study leads to a registrational study of '004; however, it should inform the planned Phase IIa studies expected to start in 2014.

## Phase IIa – (AGS-004)

Argos conducted a Phase IIa study in 29 HIV infected patients that examined the impact of '004 on VL during TI of antiretrovirals. Twenty four patients performed the TI following four monthly treatments with '004. These patients maintained on average a 81% reduction in VL vs. the pre-antiretroviral levels, measured at the end of the 12-week TI. Individual VL changes at the end of 12-weeks are shown in Exhibit 15. Interestingly, four patients that received eight monthly injections of '004 demonstrate more consistent and pronounced decreases in VL (reductions shown as the four grey bars at the right of Exhibit 15).

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#### VIRAL LOAD CHANGES VS. BASELINE



Source: Company reports

Planned Phase IIa studies – (AGS-004) Argos plans to start two additional Phase IIa studies for '004 in 2014: 1) an investigator sponsored study (IST) in adult patients that will examine the impact of '004 when used with histone deacetylase inhibitor (HDACi) agents that "reawaken" the virus from the reservoir and 2) a pediatric study looking to induce anti-HIV memory T-cells in those patients. Both studies will utilize a treatment interruption to assess '004's effectiveness but only if other viral load and reservoir assays are negative.

The IST is being planned in conjunction with the University of North Carolina and the lab of Dr. David Margolis. Argos expects the study to begin in 2H14. The clinical (non-manufacturing) costs of this study will be covered by CARE (the Collaboratory of AIDS Researchers for Eradication, led by Dr. Margolis).

The pediatric study will examine patients with a healthy immune system (except for the HIV infection) that have been treated since shortly after birth. The antiviral treatment results in a lack of anti-HIV memory T-cells. Argos believes '004 might be able to address this cellular deficit and have an impact on the infection. Argos is discussing potential funding for this study with the NIH.

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### **FINANCIALS**

Argos expects to finalize the automation for Arcelis production at a new North American facility prior to the BLA filing for '003 in mRCC. We model these costs as well as completion of the Phase III study and other studies for '003 as being covered by the IPO proceeds prior to an equity financing we project in 2016.

We project eventual cost of goods of 10% for '003, and therefore our eventual gross margins for Argos as a whole are 90% based on our current model. We model increasing R&D expenses through the expected completion of the ongoing Phase III study for '003 plus planned Phase II and possible future Phase III studies, as well as development activities for '004. SG&A we expect to ramp approaching the NDA preparation and filing, followed by preparations for commercial launch of '003, most significantly in 2016-2017. Based on our model, we project that Argos should have sufficient cash into early 2016.

## RISKS

#### Lack of compelling efficacy for AGS-003 in the mRCC Phase III

• While '003 has shown compelling early data so far, these results could fail to translate to sufficient activity in pivotal testing.

'003 could fail to achieve adequate efficacy in POC studies in other indications

#### Emergence of a concerning safety signal for '003 or other candidates

 Arcelis's safety profile appears very good, however this needs to continue to be true in the pivotal studies and safety concerns are always a risk with therapeutics.

## Regulatory risk from the FDA and other agencies

 Despite the company's possible views on the efficacy and safety of its candidates, the agencies may deny or delay their approval for a number of reasons.

## Inability to raise additional capital

 Our model assumes a secondary offering in 2016. Inability to complete this transaction might constrain Argos's cash position, limiting its ability to fully develop the company's candidates.

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## **MANAGEMENT**

Jeffrey D. Abbey - President, CEO

Mr. Abbey has been Argos's President, CEO, and board member since February 2010. He has been with Argos from September 2002 to February 2010 as VP BD (2004-2009) and Chief Business Officer (2009-2010). Prior that he was VP BD and Finance at Internet Appliance Network (1999-2001) and a partner at Eilenberg and Krause (1994-1999). He earned an A.B. in mathematical economics from Brown University and an M.B.A. and J.D. from the University of Virginia.

Charles A. Nicolette, Ph.D.

- CSO

Dr. Nicolette has been CSO since December 2007 and VP of R&D since December 2004. Prior that, he was VP of Research (2003-2004). Before joining Argos, he worked for Genzyme Molecular Oncology (1997-2003), most recently as Director of Antigen Discovery. Dr. Nicolette earned his B.S. from SUNY Stony Brook and his Ph.D. (biochemistry and cellular and developmental biology), also from SUNY at Stony Brook and at Cold Spring Harbor Laboratory.

Frederick M. Miesowicz, Ph.D. - COO Dr. Miesowicz has been Chief Operating Officer and VP of Manufacturing since February 2005. Prior that, he was VP of Manufacturing (2003-2005). Before joining Argos, he was VP of U.S. Operations for Gamida-Cell (2000-2003), SVP and GM at Hybridon Specialty Products (1998-2000), and VP and GM at Cellcor/ Cytogen (1995-1998). He earned his B.S. in chemistry from Siena College and his Ph.D. in chemistry from Harvard University.

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Argos (\$ in thousands, except per share amounts)	2011	2012	1st 9 months 2013	4Q13E	2013E	1Q14E	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E
Income Statement														
Revenue														
License and milestone fees, grants	7,643	7,039	3,706	1,700	5,406	2,000	2,000	2,000	2,000	8,000	-			
% total revenue		100%	100%		84%	100%	100%	100%	100%	100%	na	na	0%	0%
Revenues under collaborative agreements	-	-	0	1,000	1,000	-	-	-	-	-	-			
% total revenue		0%	0%		16%	0%	0%	0%	0%	0%	na	na	0%	0%
Product sales and royalties	-	-	0	-	-	-	-	-	-	-	-	-	33,503	109,677
% total revenue		0%	0%		0%	0%	0%	0%	0%	0%	na	na	100%	100%
Total Revenues	7,643	7,039	3,706	2,700	6,406	2,000	2,000	2,000	2,000	8,000	-	-	33,503	109,677
Costs & Expenses:														
Cost of product revenue	-	-	0	-	-		-	-	-	-	-	-	3,350	10,968
R&D	12,668	17,617	16,922	5,000	21,922	6,000	6,000	6,000	6,000	24,000	24,914	27,405	28,775	30,214
SG&A	3,704	6,136	3,042	1,000	4,042	4,000	4,000	4,000	4,000	16,000	16,609	17,440	21,799	25,069
Total Operating Expenses	16,372	23,752	19,964	6,000	25,964	10,000	10,000	10,000	10,000	40,000	41,523	44,844	53,925	66,251
Operating Income (loss)	(8,729)	(16,713)	(16,258)	(3,300)	(19,558)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Investment income	1	5	3	-	3	-	-	-	•	-	-	-	-	-
Interest expense	(6,656)	(292)	(1)	-	(1)	-	-	-	-	-	-	-	-	-
Other expense	(4,756)	6,530	355	-	355	-	-	-	-	-	-	-	-	-
Income (loss) before income taxes	(20,141)	(10,471)	(15,901)	(3,300)	(19,201)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Income tax (benefit) provision	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax rate	-	-		35.0%		35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Net income (loss)	(20,141)	(10,471)	(15,901)	(3,300)	(19,201)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Net loss from non-controlling interest	(63)	-	0	-	-									
Net income (loss) available to common stockholders	(20,078)	(10,471)	(15,901)	(3,300)	(19,201)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Add back: accretion of redeemable convertible preferred stock	(927)	(352)	5,250	-	5,250									
Less: net income attributable to participating securities	-	-	(14,726)	-	(14,726)									
Net income (loss) to common shareholders	(21,004)	(10,824)	(25,377)	(3,300)	(28,677)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Basic Earnings Per Share	(32.88)	(9.10)	(\$18.53)	(\$2.41)	(\$20.94)	(\$0.40)	(\$0.40)	(\$0.40)	(\$0.40)	(\$1.61)	(\$2.09)	(\$1.73)	(\$0.79)	\$1.68
Diluted Earnings Per Share	(32.88)	(9.10)	(\$18.53)	(\$2.41)	(\$20.94)	(\$0.40)	(\$0.40)	(\$0.40)	(\$0.40)	(\$1.61)	(\$2.09)	(\$1.73)	(\$0.79)	\$1.68
Basic Shares Outstanding	639	1,190	1,369	1,369	1,369	19,893	19,893	19,893	19,893	19,893	19,893	25,893	25,893	25,893
Diluted Shares Outstanding	639	1,190	1,369	1,369	1,369	19,893	19,893	19,893	19,893	19,893	19,893	25,893	25,893	25,893

Proprietary to Piper Jaffray & Co. March 4, 2014
Argos: Charles Duncan; 212.284.2505
Current disclosure information for this company can be found at:
http://www.piperjaffray.com/researchdisclosures

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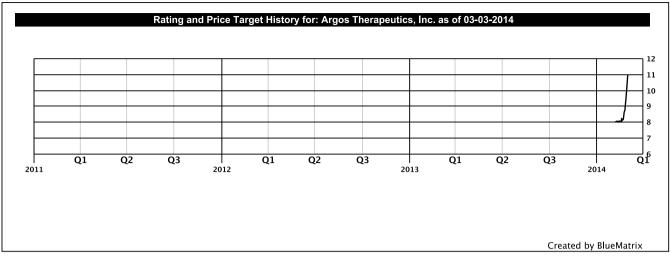
	i											ii.		ı
Balance Sheet	2011	2012	1st 9 months 2013	4Q13E	2013E	1Q14E	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E
Current assets														l
Cash and cash equivalents	2.003	8.215	18.224	35,219	35,219	111.614	99.364	87.114	74.864	74.864	16,403	138,818	114.947	152,873
Marketable securities. AFS	0	4.149	0	0	0	0	0	0	0	0	0	0	0	0
Accounts receivable	1.037	979	671	0	0	0	0	0	0	o	0	0	1.675	5,484
Inventories, net	0	0	0	0	0	0	0	0	0	o	0	0	0	1 0
Prepaid expenses and other current assets	2.025	514	635	0	0	0	0	0	0	o	0	0	o	1 0
Total current assets	5,066	13,857	19,530	35,219	35,219	111,614	99,364	87,114	74,864	74,864	16,403	138,818	116,623	158,357
Total property, plant and equipment, net	908	1,539	1,482	1,232	1,232	5,982	10,732	15,482	20,232	20,232	39,232	43,232	47,232	51,232
Other assets	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total assets	5,974	15,397	21,013	36,451	36,451	117,596	110,096	102,596	95,096	95,096	55,635	182,050	163,855	209,589
														1
Current liabilities														l .
Accounts payable & accrued expenses	1,885	1,691	1,406	(19,000)	(19,000)	1,000	1,000	1,000	1,000	1,000	1,061	1,121	1,348	1,656
Convertible promissory notes, including accrued interest payable	10,376	0	0	0	0	0	0	0	0	0	0	0	0	. 0
Deferred revenue, current portion	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0
Current portion long term debt	0	32	32	0	0	0	0	0	0	0	0	0	0	. 0
Other	12,346	6,393	0	0	0	0	0	0	0	0	0	0	0	. 0
Total current liabilities	24,607	8,115	1,438	(19,000)	(19,000)	1,000	1,000	1,000	1,000	1,000	1,061	1,121	1,348	1,656
Deferred revenue, net of current portion	0	0	0	0	ō	0	0	0	0	0	0	0	0	0
Long-term debt. net	0	48	24	9.000	9.000	29.000	29.000	29.000	29.000	29.000	29.000	29.000	29.000	29.000
Deferred obligation	0	0	0	0,000	0,000	25,000	29,000	29,000	29,000	29,000	25,000	25,000	25,000	25,000
Other long-term liabilities	0	ı ő	0	0	o o	0	0	0	0	0	0	0	ů	l ő
Total liabilities	24.607	8,164	1,462	(10,000)	(10,000)	30.000	30,000	30,000	30,000	30.000	30.061	30,121	30,348	30.656
Total labilities	24,007	0,104	1,402	(10,000)	(10,000)	00,000	00,000	00,000	00,000	00,000	00,001	00,121	00,040	00,000
Commitments														ı
Stockholders' equity:														l .
Convertible preferred stock	77,722	75,801	87,326	113,326	113,326	0	0	0	0	0	0	0	0	. 0
Accumulated other comprehensive income	86	(94)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)	(99)
Common stock	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Additional paid-in capital	29,413	58,468	75,166	79,361	79,361	241,832	242,332	242,832	243,332	243,332	245,332	416,532	418,532	420,532
Accumulated deficit	(128,829)	(126,943)	(142,843)	(146,143)	(146,143)	(154,143)	(162,143)	(170,143)	(178, 143)	(178,143)	(219,666)	(264,510)	(284,933)	(241,507)
Total stockholders' equity	(21,607)	7,233	19,550	46,446	46,446	87,591	80,091	72,591	65,091	65,091	25,568	151,924	133,502	178,928
Total liabilities and stockholders' equity	5,974	15,397	21,013	36,446	36,446	117,591	110,091	102,591	95,091	95,091	55,630	182,045	163,850	209,584

Total labilities and stockholders' equity
Proprietary to Piper Jaffray & Co. March 4, 2014
Argos: Charles Duncan; 212.284.2505
Current disclosure information for this company can be found at:
http://www.piperjaffray.com/researchdisclosures

Argos (\$ in thousands, except per share amounts)														
Cash Flow Statement	2011	2012	1st 9 months 2013	4Q13E	2013E	1Q14E	2Q14E	3Q14E	4Q14E	2014E	2015E	2016E	2017E	2018E
CASH FLOWS FROM OPERATING ACTIVITIES														
Net Income (Loss)	(20,141)	(10,471)	(15,901)	(3,300)	(19,201)	(8,000)	(8,000)	(8,000)	(8,000)	(32,000)	(41,523)	(44,844)	(20,422)	43,426
Adjustments to reconcile to cash used in operating activities:														
Depreciation and amortization	680	505	473	250	723	250	250	250	250	1,000	1,000	1,000	1,000	1,000
Stock-based compensation expense	472	1,044	587	196	782	500	500	500	500	2,000	2,000	2,000	2,000	2,000
Change in fair value of warrant liability	4,662	(4,917)	(355)	-	(355)	-	-	-	-	-	-	-	-	-
Change in fair value of investor rights / obligations	-	-	-	-	-	-	-	-	-	-	-	-	-	
Write-off defered financing costs	-	1,786	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash interest expense	6,656	292	-											
Derivative expense (income)	95	(1,036)		-	-	-	-	-	-	-	-	-	-	
Issuance of restricted stock for consulting expense	9	15	17	-	17	-	-	-	-		-	-	-	-
Loss (gain) on disposal of equipment	1	(5)	(51)		(51)	-	-	-	-	-	-	-	-	-
Change in operating assets and liabilities:														
Other receivable	-	-	-	671	671	-	-	-	-	-	-	-	(1,675)	(3,809
Inventories	-	-			-	-	-	-	-	-	-	-	-	
Prepaid expenses and other assets	2,878	(216)	270	635	905	-	-	-	-	-	-	-	-	-
Accounts payable and accrued expenses	103	(194)	(285)	(20,406)	(20,691)	20,000	-	-	-	20,000	61	60	227	308
Deferred revenue	-				-		-	-	-	-	-	-	-	
Net cash used in operating activities	(4,586)	(13,198)	(15,246)	(21,954)	(37,200)	12,750	(7,250)	(7,250)	(7,250)	(9,000)	(38,461)	(41,785)	(18,870)	42,926
CASH FLOWS FROM INVESTING ACTIVITIES														
Purchases of marketable securities, net	ł	(4.149)	4.149		4.149									
	(244)	(1,132)	(364)	-	(364)	(5,000)	(5,000)	(5.000)	(5,000)	(20.000)	(20,000)	(5,000)	(5.000)	(5,000)
Purchase of property, plant and equipment, net	(244)	(5,281)	3,785		3.785	(5,000)	(5,000)	(5,000)	(5,000)	(20,000)	(20,000)	(5,000)	(5,000)	
Net cash provided by (used in) investing activities	(244)	(5,281)	3,785		3,785	(5,000)	(5,000)	(5,000)	(5,000)	(20,000)	(20,000)	(5,000)	(5,000)	(5,000)
CASH FLOWS FROM FINANCING ACTIVITIES														
Proceeds from convertible promissory notes	3,500	-	-	0	-	0	0	0	0	-	-	0	0	0
Financing costs on convertible promissory notes		-	-	0	-	0	0	0	0	-	-	0	0	0
Proceeds from issuance of common stock, net	(1,786)	(209)	82	30,000	30,082	48,645	0	0	0	48,645	-	169,200	0	O
Stock option exercise	-	-	-	0	-	0	0	0	0	-	-	0	0	0
Proceeds from notes payable		96												
Repayment of LTD, net	(27)	(16)	(24)	8,944	8,920	20,000	0	0	0	20,000	-	0	0	0
Proceeds from issuance of convertible preferred stock	-	25,000	21,417	0	21,417	0	0	0	0	-	-	0	0	0
Proceeds from issuance of common stock under equity incentive plans, net		-		0	-	0	0	0	0		-	0	0	0
Net cash provided by (used in) financing activities	1,687	24,871	21,476	38,944	60,419	68,645	0	0	0	68,645	0	169,200	0	0
			(0)	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effect of exchange rate	3	(180)	(U)	0.0	(0.1)									
	(3,139)	(180) 6,212	10,014	16,990	27,004	76,395	(12,250)	(12,250)	(12,250)	39,645	(58,461)	122,415	(23,870)	37,926
Net increase in cash and cash equivalents	(3,139) 5,142	6,212 2,003	10,014 8,215				111,614	(12,250) 99,364	(12,250) 87,114	35,219	74,864	16,403	138,818	114,947
Net increase in cash and cash equivalents Cash and cash equivalents at beginning of period	(3,139)	6,212	10,014	16,990	27,004	76,395								
Effect of exchange rate Net increase in cash and cash equivalents Cash and cash equivalents at beginning of period Cash and cash equivalents at end of period Proprietary to Piper Jaffray & Co. March 4, 2014	(3,139) 5,142	6,212 2,003	10,014 8,215	16,990 18,229	27,004 8,215	76,395 35,219	111,614	99,364	87,114	35,219	74,864	16,403	138,818	114,947

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## **IMPORTANT RESEARCH DISCLOSURES**



Notes: The boxes on the Rating and Price Target History chart above indicate the date of the Research Note, the rating, and the price target. Each box represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first Note written during the past three years.

Legend:

I: Initiating Coverage

R: Resuming Coverage

T: Transferring Coverage

D: Discontinuing Coverage

S: Suspending Coverage

OW: Overweight

N: Neutral

UW: Underweight NA: Not Available UR: Under Review

	Distribution of Ratings/IB Ser Piper Jaffray	vices							
Rating	Count	Percent	Count	Percent					
BUY [OW]	353	59.63	81	22.95					
HOLD [N]	218	36.82	22	10.09					
SELL [UW]	21	3.55	0	0.00					

Note: Distribution of Ratings/IB Services shows the number of companies currently in each rating category from which Piper Jaffray and its affiliates received compensation for investment banking services within the past 12 months. FINRA rules require disclosure of which ratings most closely correspond with "buy," "hold," and "sell" recommendations. Piper Jaffray ratings are not the equivalent of buy, hold or sell, but instead represent recommended relative weightings. Nevertheless, Overweight corresponds most closely with buy, Neutral with hold and Underweight with sell. See Stock Rating definitions below.

Analyst Certification — Charles C. Duncan, PhD, Sr. Research Analyst — Roy Buchanan, Ph.D., Research Analyst

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