

# BIND Therapeutics (BIND)

## SMALL & MID CAP RESEARCH

### New Research Collaboration with Roche

BIND announced a new collaboration with Roche for developing therapeutics utilizing its Accurin technology. This collaboration will be for non-oncology indications and the terms of the deal were not disclosed. We continue to believe that BIND's technology is a valuable platform for enhancing the delivery and therapeutic index of drugs. Phase II results for BIND-014 remain the primary catalyst in H2:14.

Rating	<b>OUTPERFORM*</b> [V]
Price (18 Jun 14, US\$)	10.32
Target price (US\$)	21.00 <sup>1</sup>
52-week price range	15.40 - 8.06
Market cap. (US\$ m)	169.76
Enterprise value (US\$ m)	58.27

\*Stock ratings are relative to the coverage universe in each analyst's or each team's respective sector.  
<sup>1</sup>Target price is for 12 months.

[V] = Stock considered volatile (see Disclosure Appendix).

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- **BIND adds new Accurin collaboration:** BIND has entered into a new research collaboration to develop new therapeutics with Roche's proprietary ligands and payloads. This adds to BIND's three other partnerships with AMGN, AZN, and PFE. Roche is looking to improve the profile of one of its undisclosed proprietary drugs using the Accurin technology and specific targeting ligands (also proprietary to Roche). While this is an early-stage collaboration, this partnership provides additional validation of the technology and means to advance the technology outside of oncology.
- **Key data in H2:14:** Catalysts for BIND in 2014 include (1) Phase II open-label study data expected in H2:14, and (2) IND-filings from partnered programs expected in 2014.
- **Valuation:** Our \$21 target price for BIND includes \$17 for BIND-014 and \$4 for the partnerships. For BIND-014, we assume a 65% probability of success and a 2018 launch.

#### Financial and valuation metrics

Year	12/13A	12/14E	12/15E	12/16E
EPS (CS adj.) (US\$)	-5.28	-2.03	-0.22	-2.05
Prev. EPS (US\$)	—	—	—	—
P/E (x)	-2.0	-5.1	-47.5	-5.0
P/E rel. (%)	-11.2	-31.9	-330.5	-38.8
Revenue (US\$ m)	10.9	9.0	67.4	19.2
EBITDA (US\$ m)	-25.4	-35.2	-3.4	-59.7
OCFPS (US\$)	-2.19	-1.84	-0.06	-1.75
P/OCF (x)	-6.9	-5.6	-167.9	-5.9
EV/EBITDA (current)	-4.8	-3.5	-36.6	-2.1
Net debt (US\$ m)	-47	-111	-108	-221
ROIC (%)	-119.99	-86.30	-10.23	-124.43
Number of shares (m)	16.45	IC (current, US\$ m)		22.39
BV/share (Next Qtr., US\$)	10.7	EV/IC (x)		3.7
Net debt (Next Qtr., US\$ m)	-21.9	Dividend (current, US\$)		—
Net debt/tot cap (Next Qtr., %)	-35.2	Dividend yield (%)		—

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## Modular Platform for Drug Delivery

### Platform Is Broadly Applicable for Different Drugs, Targeting Multiple Tissues and Tumor Types

BIND's nanomedicine platform was developed out of technology from the lab of Robert Langer and Omid Farokhzad at MIT and Harvard, respectively. Essentially, the labs developed a polymer system that can encapsulate cytotoxic chemotherapy agents. The polymers can be modified with specific targeting agents to direct the nanoparticle to the tumor. The polymer system and targeting ligand of BIND-014 were discovered through screening a large library of nanoparticle formulations for key properties (e.g., size, charge, degradation rate, release rate, drug loading, and surface density targeting ligand).

In theory, there are two potential advantages to this approach over conventional chemotherapy.

- 1) The drug might be expected to accumulate in tumor tissue at higher concentrations than conventional chemotherapy, due to the longer circulation time of the nanoparticle, the physical properties of the particles that tend to accumulate in tumors, and molecular targeting with a selective ligand to enhance tumor localization and retention.
- 2) The drug's toxic effects on healthy tissues could be less than with free/unbound drug, since the nanoparticle is designed to accumulate in the tumor selectively. The nanoparticle is a controlled-release formulation, so there is relatively little free drug in the bloodstream (estimated <10% free drug). In Phase I, there was evidence that the nanoparticle formulation reduced severity of docetaxel's nonhematological side effects.

## Multiple Deals with Big Pharma

BIND has signed three development deals with big pharma (see Exhibit 1), which provide external validation, nondilutive funding, and add future pipeline growth. We expect BIND could announce additional deals in the next 6-12 months. We believe that the size of the deals will increase as the platform is validated.

Each of the deals is focused on delivering a specific drug or drugs with a specific targeting ligand. The deals are exclusive for the drug (which is typically proprietary to the partner) but are nonexclusive with respect to the nanoparticle design. BIND retains full rights to the platform IP. BIND expects its partners to advance at least one of these programs to the clinic by YE:14.

**Exhibit 1: Collaboration Programs**

	Amgen	Pfizer	AstraZeneca
Date	Jan. 2013	Mar 2013	Apr 2013
Terms	Single license option deal	Two license option deal	Single license option deal
Upfront	\$5M	\$4M	\$4M
Option & development milestones	\$111.5M	\$89.5M	\$193M
Commercial milestones	\$188M	\$110M	
Royalties	Mid single to low double digit	Low single to high single digit	Low single to low double digit
Drug	Kinase inhibitor (oncology)	Not disclosed	Kinase inhibitor (oncology)

Source: Company data, Credit Suisse research.

### Amgen Deal Overview

- Amgen has 12 months from the effective date to exercise the option.

- If Amgen exercises the option, it is responsible for all further R&D and commercialization costs.
- Amgen must pay an annual fee to maintain the agreement. The annual fee totals \$54M over ten years.
- BIND received an upfront payment of \$5M.
- BIND has the potential to receive payments for up to two indications totaling up to \$111.5M in aggregate for exercise of the option and achievement of specified development and regulatory milestones.
- There is the potential for an additional \$188M in payments for specified commercial milestones.
- BIND may receive midsingle-digit to low-double-digit royalties on WW net sales.
- If the product makes it market, BIND will manufacture it with a 20% markup.

#### **Pfizer Deal Overview**

- Pfizer has two options that may be exercised within 30 months of the effective date.
- If Pfizer exercises the option, it is responsible for all further R&D and commercialization costs.
- BIND received an upfront payment of \$4M.
- BIND has the potential to receive payments totaling up to \$89.5M in aggregate under each option upon exercise of option and achievement of specified development and regulatory milestones.
- There is the potential for an additional \$110M in payments for specified commercial milestones under each option
- BIND may receive low-single- to high-single-digit royalties on WW net sales.
- If the product makes it market, BIND will manufacture it with a 20% markup.

#### **AstraZeneca Deal Overview**

- BIND entered a license with AstraZeneca in April 2013.
- BIND received an upfront payment of \$4M.
- BIND has the potential to receive up to \$193M in aggregate upon achievement of specified clinical, regulatory, and commercial events.
- BIND may receive low-single- to low-double-digit royalties on WW net sales.

If the product makes it market, BIND will manufacture it with a 20% markup.

**Exhibit 2: BIND News Flow**

Product/Event	Indication	Catalyst	Expected Date
BIND-014	KRAS mutant NSCLC	Initiate new Phase II trial	Q3:14
BIND-014	4 new indications	Initiate new Phase II trial	Q3:14
BIND-014	NSCLC and mCRPC	Phase II data in NSCLC and mCRPC	H2:14
Partnered program	N/A	IND submission	YE:14 / Early 2015
BIND-014	KRAS mutant NSCLC	Initial Phase II data	Q1:15
BIND-014	4 new indications	Initial Phase II data	H1:15
2nd BIND product	N/A	IND submission	2015
3rd BIND product	N/A	IND enabling tox studies	2015

Source: Company data, Credit Suisse estimates

**Exhibit 3: BIND Pipeline**

Drug	Indication	Stage	Partner
BIND 014 (PSMA targeted docetaxel)	NSCLC and mCRPC	Phase II	Proprietary
Solid Tumor Accurin	Solid Tumor	Pre-clinical	Proprietary
Hematologic Cancer Accurin	Hematologic Cancer	Pre-clinical	Proprietary
AZD1152 (Aurora-B kinase inhibitor)	N/A	Pre-clinical	AstraZeneca
Oncology kinase inhibitor	N/A	Pre-clinical	Amgen
Targeted therapies	N/A	Pre-clinical	Pfizer

Source: Company data, Credit Suisse estimates

**Exhibit 4: BIND Earnings Model**

	2013A	Q1:14A	Q2:14E	Q3:14E	Q4:14E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
<b>Revenues</b>														
BIND-014 US sales										50.6	218.9	355.2	416.1	484.7
BIND-014 ex-US royalties and mfg. rev										8.1	22.0	22.0	33.7	46.2
Partnering, grants, milestones	10.9	1.6	0.8	5.8	0.8	9.0	67.4	19.2	38.4	39.0	10.0	23.8	10.0	10.0
<b>Total Revenues</b>	<b>10.9</b>	<b>1.6</b>	<b>0.8</b>	<b>5.8</b>	<b>0.8</b>	<b>9.0</b>	<b>67.4</b>	<b>19.2</b>	<b>38.4</b>	<b>89.6</b>	<b>237.1</b>	<b>401.0</b>	<b>459.9</b>	<b>540.9</b>
<b>Expenses</b>														
Research and development	24.4	6.8	8.0	8.5	9.0	32.3	57.0	60.4	64.0	67.9	71.3	74.8	78.6	82.5
Sales, general, administrative	13.4	3.3	3.3	3.4	3.4	13.3	15.3	20.1	36.1	107.9	113.3	119.0	124.9	131.2
Cost of goods										6.1	26.3	42.6	49.9	58.2
Royalty expense										1.5	6.6	10.7	12.5	14.5
<b>Total Operating Expenses</b>	<b>37.8</b>	<b>10.1</b>	<b>11.3</b>	<b>11.9</b>	<b>12.4</b>	<b>45.7</b>	<b>72.3</b>	<b>80.5</b>	<b>100.2</b>	<b>183.4</b>	<b>217.4</b>	<b>247.1</b>	<b>265.9</b>	<b>286.4</b>
Operating income (loss)	(26.9)	(8.5)	(10.5)	(6.1)	(11.6)	(36.7)	(4.9)	(61.3)	(61.8)	(93.8)	19.6	153.9	193.9	254.5
Total Other Income (Expense)	(0.8)	0.2	(0.0)	(0.0)	(0.0)	0.2	(0.0)	0.8	0.6	0.4	0.8	1.0	1.2	1.5
Pre Tax Income	(27.7)	(8.3)	(10.5)	(6.1)	(11.6)	(36.6)	(5.0)	(60.5)	(61.2)	(93.4)	20.4	154.9	195.1	256.0
Income tax													68.3	89.6
<b>Net Income</b>	<b>(31.4)</b>	<b>(8.3)</b>	<b>(10.5)</b>	<b>(6.1)</b>	<b>(11.6)</b>	<b>(36.6)</b>	<b>(5.0)</b>	<b>(60.5)</b>	<b>(61.2)</b>	<b>(93.4)</b>	<b>20.4</b>	<b>154.9</b>	<b>126.8</b>	<b>166.4</b>
<b>EPS - basic (proforma)</b>	<b>(\$5.28)</b>	<b>(\$0.51)</b>	<b>(\$0.64)</b>	<b>(\$0.37)</b>	<b>(\$0.51)</b>	<b>(\$2.03)</b>	<b>(\$0.22)</b>	<b>(\$2.05)</b>	<b>(\$2.04)</b>	<b>(\$3.08)</b>	<b>\$0.66</b>	<b>\$4.95</b>	<b>\$3.99</b>	<b>\$5.16</b>
<b>EPS - diluted (proforma)</b>	<b>(\$5.28)</b>	<b>(\$0.51)</b>	<b>(\$0.64)</b>	<b>(\$0.37)</b>	<b>(\$0.51)</b>	<b>(\$2.03)</b>	<b>(\$0.22)</b>	<b>(\$2.05)</b>	<b>(\$2.04)</b>	<b>(\$3.08)</b>	<b>\$0.59</b>	<b>\$4.43</b>	<b>\$3.57</b>	<b>\$4.61</b>
Shares outstanding - basic (proforma)	5.94	16.42	16.51	16.59	22.67	18.05	22.96	29.48	29.92	30.37	30.82	31.28	31.75	32.23
Shares outstanding - diluted (proforma)	5.94	16.42	16.51	16.59	22.67	18.05	23.77	29.48	29.92	30.37	34.43	34.97	35.51	36.06

Source: Company data, Credit Suisse estimates

**Companies Mentioned** (Price as of 19-Jun-2014)**Amgen Inc.** (AMGN.OQ, \$117.49)**AstraZeneca** (AZN.L, 4444.0p)**BIND Therapeutics** (BIND.OQ, \$10.32)**Pfizer** (PFE.N, \$29.71)**Roche** (ROG.VX, SFr266.4)

## Disclosure Appendix

**Important Global Disclosures**

Jason Kantor, PhD, Ravi Mehrotra PhD and Lee Kalowski each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

**3-Year Price and Rating History for Amgen Inc. (AMGN.OQ)**

AMGN.OQ	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
01-Aug-11	53.77	59.00	N
07-Nov-11	58.43		R
08-Dec-11	58.41	59.00	N
09-Dec-11	58.59	71.00	
25-Jul-12	77.96	85.00	O
26-Jul-12	79.30	90.00	
03-Jan-13	88.59	100.00	
22-Jan-13	83.29	90.00	N
04-Mar-13	92.73	100.00	
04-Apr-13	105.90	115.00	
17-May-13	105.63	120.00	
10-Dec-13	114.10	125.00	

\* Asterisk signifies initiation or assumption of coverage.

**3-Year Price and Rating History for AstraZeneca (AZN.L)**

AZN.L	Closing Price	Target Price	
Date	(p)	(p)	Rating
19-Oct-11	2981.00	2600.00	U
21-May-12	2654.50		*
22-May-12	2650.00		*
17-Jul-12	2953.50	2600.00	U
14-Jan-13	3030.00	3050.00	
22-Apr-13	3350.00	3130.00	
10-Oct-13	3133.00	3220.00	
20-Jan-14	3920.00	4000.00	
28-Apr-14	4666.50	4800.00	N

\* Asterisk signifies initiation or assumption of coverage.



## 3-Year Price and Rating History for BIND Therapeutics (BIND.OQ)

BIND.OQ	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
15-Oct-13	15.10	21.00	O *

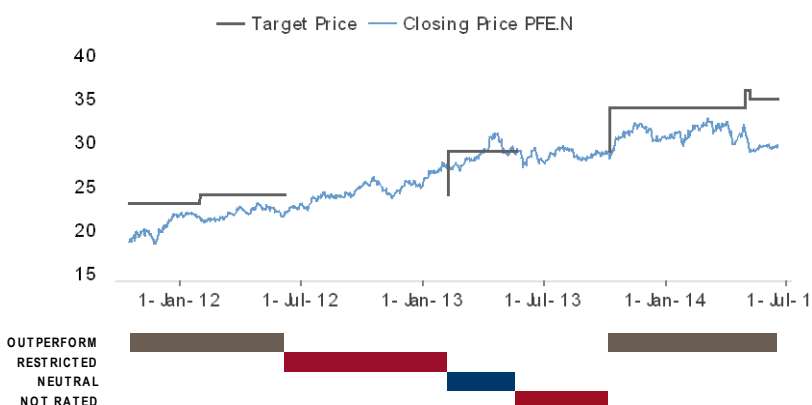
\* Asterisk signifies initiation or assumption of coverage.



## 3-Year Price and Rating History for Pfizer (PFE.N)

PFE.N	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
17-Oct-11	18.69	23.00	O
31-Jan-12	21.40	24.00	
07-Jun-12	21.94		R
07-Feb-13	26.96	29.00	N
22-May-13	29.30		NR
08-Oct-13	28.24	34.00	O *
01-May-14	31.15	36.00	
07-May-14	29.02	35.00	

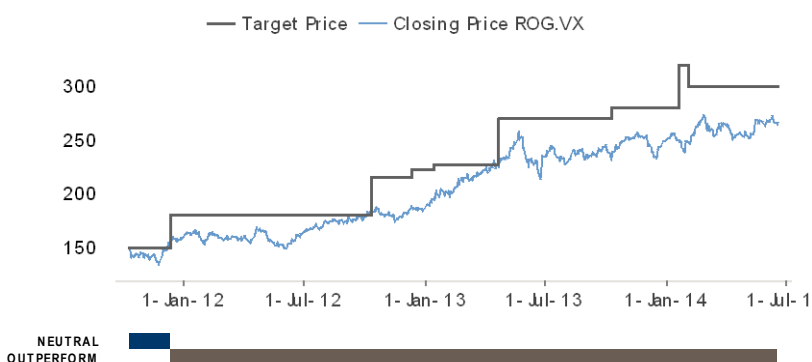
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## 3-Year Price and Rating History for Roche (ROG.VX)

ROG.VX	Closing Price	Target Price	
Date	(SFr)	(SFr)	Rating
11-Oct-11	148.90	150.00	N
12-Dec-11	153.90	180.00	O
11-Oct-12	181.20	215.00	
12-Dec-12	187.20	223.00	
14-Jan-13	194.60	227.00	
22-Apr-13	225.10	270.00	
10-Oct-13	234.60	280.00	
20-Jan-14	250.00	320.00	
03-Feb-14	248.20	300.00	

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Restricted	3%	

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