

## Initiating Coverage

October 23, 2014

TICKER NASDAQ: XNCR  
RATING BUY  
PRICE TARGET \$15.00  
Price (October 22, 2014) \$10.24

## Xencor, Inc.

### *Versatile XmAb Platform Generates Rich Pipeline; SOTP Reveals Current Platform Value*

#### Market Data and Valuation Multiples

|                          |                |
|--------------------------|----------------|
| Market Cap (M):          | \$321.5        |
| Shares out (M):          | 31.4           |
| Float (M):               | 17.3           |
| Daily Vol, 3 Mo Avg (M): | 0.0            |
| 52-Week Range:           | \$14.41-\$5.75 |
| Cash & Cash Eq (M):      | \$66.2         |
| Debt (M):                | \$0.0          |
| NAV (M):                 | NA             |

#### Financial Metrics

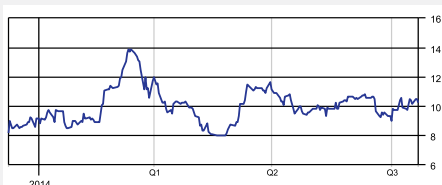
|                              |     |
|------------------------------|-----|
| Short Interest (M):          | 0.6 |
| Instit. Holdings (%):        | NA  |
| Cash Burn (M):               | NA  |
| Short Interest (% of Float): | NA  |

| EPS  | 1Q     | 2Q     | 3Q     | 4Q     | FY     |
|------|--------|--------|--------|--------|--------|
| 2014 | -0.12E | -0.16E | -0.18E | -0.11E | -0.58E |
| 2015 | -0.17E | -0.17E | -0.02E | -0.17E | -0.55E |

| Revenue (\$M) | 1Q   | 2Q   | 3Q   | 4Q   | FY   |
|---------------|------|------|------|------|------|
| 2014          | 2.2E | 0.8E | 0.5E | 2.0E | 5.5E |
| 2015          | 0.5E | 0.5E | 5.0E | 0.5E | 6.5E |

Note:

#### 1-Year Price History



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Xencor's proprietary XmAb platform has generated 7 therapeutic antibodies in clinical testing. While difficult to quantify, we think the platform's role in generating new drugs is critical to XNCR's continued growth. We ascribe the XmAb platform \$6/share value based on 7 announced partnerships. We note additional partnerships or pipeline developments would represent upside to our model. Additionally, we estimate wholly owned Phase 1a anti-IgE antibody XmAb7195 for asthma and other inflammatory diseases is worth \$8/share based on our probability-adjusted DCF. With multiple data points for multiple products over the next 12-18 months, XNCR has a well-balanced mix of near-, mid-, and long-term value drivers, but we believe its longer-term value is underappreciated.

**Proprietary XmAb Platform's Ability to Generate Unique Antibodies Drives Longer Term Growth; Currently Valued at \$6/Share.** Arguably, XNCR's most attractive asset is the XmAb platform that enables expansion of XNCR's own proprietary pipeline and/or additional therapeutic candidates for partners. The ability to engineer antibody function has resulted in seven partnerships and seven antibodies in the clinic. Thus, we view the XmAb platform as validated, although its current valuation may not fully reflect its worth.

**Wholly Owned Next Generation Anti-IgE XmAb7195 Provides \$8/Share Valuation.** XmAb7195 binds IgE in the blood, clearing it and preventing it from activating inflammatory cells. Unlike first generation anti-IgE Xolair, it also inhibits the activation of IgE producing B cells. In animal models, XmAb7195 has shown more effective suppression of circulating IgE than Xolair. We think XmAb7195 can generate peak US sales of \$1.5B in 2030 in inadequately controlled moderate-severe adult asthma patients. Though we note XmAb7195's potential in additional immune indications like pediatric asthma, urticaria (hives), and allergic rhinitis, we do not currently include them in our model.

**Lead Partnered Product Candidates Worth \$4.** Phase 2 anti-CD19 antibodies XmAb5871 (AMGN option) and XmAb5574/MOR208 are in development for autoimmune and oncology indications, respectively. We believe anti-CD19 antibodies will garner a significant share of the anti-CD20 market and estimate 5871 and 5574 could generate 25-33% of anti-CD20 Rituxan sales, or ~\$2.5B.

**Upcoming Catalysts.** By year end, we expect multiple data points from multiple programs, including Phase 2 XmAb5574 data in NHL and preclinical data from XNCR's bispecific program at the annual meeting of the American Society of Hematology December 6-9 (abstracts on November 6). We also anticipate Phase 1b/2a topline data for XmAb5871 in moderate-severe rheumatoid arthritis patients on stable non-biologic therapy. XNCR has also guided to additional technology licensing deals and additional partner milestones. In 2015, we expect data for the XmAb7195 program including Phase 1a IgE reduction data (1Q) and Phase 1b multiple ascending dose results (2H). We also anticipate IND enabling studies for a proprietary bispecific program.

**Valuation:** We derive a value of \$15 per XNCR share based on a probability-adjusted sum-of-the-parts analysis.

#### IMPORTANT DISCLOSURES AND CERTIFICATIONS.

MLV & Co LLC is a provider of research and execution services. MLV is a member of FINRA. MLV does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Please see important disclosures on page 23 - 25.

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**INVESTMENT THESIS**

We are initiating coverage on XNCR with a Buy and \$15 price target. Xencor's proprietary XmAb antibody platform allows differentiating properties to be engineered into any antibody. The XmAb platform has generated seven antibody therapeutics currently in the clinic, garnered seven partnerships with large pharmaceutical and biotech companies, and has the potential to generate many more antibody therapeutic candidates.

**Wholly Owned Asset XmAb7195 Represents \$8 Valuation.** XNCR's leading drug XmAb7195 for the treatment of allergic asthma is currently in Phase 1a trials and on track to deliver IgE reduction data in 1Q15. We assigned it a 33% probability of successfully reaching the market, which we estimate would be in 2022. In the US, we believe XmAb7195 can generate peak \$1.5B sales by 2030, from inadequately controlled moderate-severe adult asthma patients, representing \$8/share of our \$15 price target.

**But Strong Platform (Currently Worth \$6/share) Is Driver of Long-Term Growth.** We believe the ability of the XmAb platform to confer specific and differentiated characteristics to any antibody is very attractive and likely undervalued. Xencor's partnerships with major biopharmaceuticals such as Merck (MRK, NR), Boehringer Ingelheim (BING:GR, NR), Amgen (AMGN, NR), and Janssen (JNJ, NR) show significant interest and validation of the XmAb platform. XmAB5871 and XmAb5574/MOR208, the two partnered lead drugs in XNCR's pipeline in co-development with Amgen and Morphosys, respectively, are already in Phase 2 development. While we also include five Phase 1 and two preclinical drugs in our partnership valuation, we expect additional partnerships and additional therapeutic candidates to advance, neither of which are included in our current valuation. We ascribe no value in our models to potential but unrealized drug candidates developed utilizing the XmAb platform either for partnerships or Xencor's internal pipeline. However, we believe those opportunities present significant upside to our valuation.

**Potential for Non-Dilutive Funding from Deals.** Xencor estimates current cash is sufficient through 2016. We also include the remaining \$12M development from AMGN for XmAb5871 in 2014-2016. While we anticipate a cash raise in 2017, we note additional licensing deals for products generated from the XmAb platform could provide non-dilutive financing for XNCR.

**Rating Rationale**

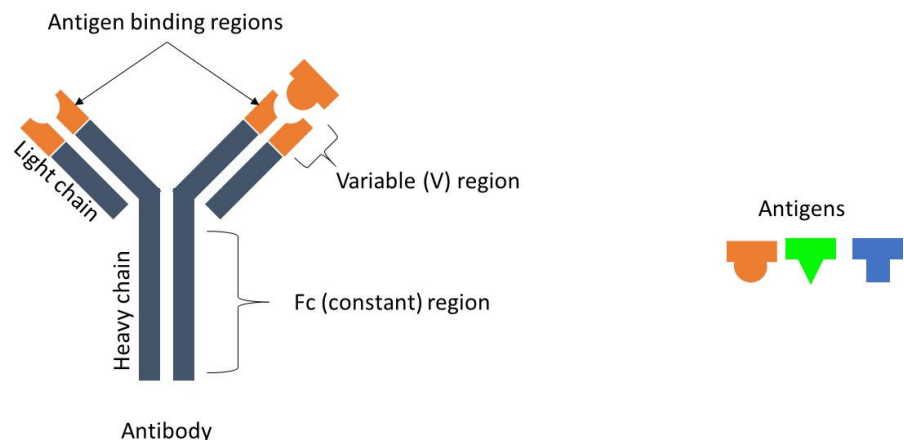
Our Buy rating is based on our view that the proprietary XmAb antibody platform, allowing differentiating properties to be engineered into any antibody, is an attractive asset that can continue to generate antibody therapeutics for XNCR's proprietary pipeline and/or partnerships. We estimate wholly owned lead product candidate XmAb7195 is worth \$8 share based on a 33% probability of reaching the market and peak global revenues of \$2.3B in 2030. An additional \$6 per share valuation is derived from the current 7 products XNCR's partners have in development, and XNCR has \$1 per share in cash.

## BACKGROUND

### *Antibody Background*

Part of the immune system, B cells are a type of lymphocyte (white blood cell) that produce antibodies to help fight off foreign pathogens. Individual B cells produce a unique antibody that recognizes and binds tightly to a specific target antigen on the pathogen, thereby tagging the pathogen for destruction by the immune system. Antibodies' specificity and ability to recruit the immune system are attractive properties that can be commandeered to develop therapeutic drugs for indications including cancers and inflammatory diseases.

*Exhibit 1. Antibody Schematic. Antibodies are composed of two identical subunits that bind to one another. Each arm can bind a matching antigen.*



Source: MLV & Co. research

Functional antibodies consist of two identical subunits that form a Y shaped structure with two arms. Each unit has a V (variable) region, which binds the antigen, and an Fc (constant) region, which allows the two units to bind together into one unit (dimerization) (See Exhibit 1). Antibodies with different V regions bind different antigens. While the human body can generate a limitless number of V regions, any given B-cell makes only one. This means it is possible to find a unique B-cell that will make an antibody to specifically target almost any cell marker.

In addition to its role in dimerization, the Fc region of an antibody also has effector domains that interact with the immune system. By altering these effector domains, Xencor's technology can modulate the antibody's ability to trigger downstream events including:

- Complement cascade activation
- Phagocytosis of microbes
- Antibody-dependent, cell-mediated cytotoxicity
- IgE-mediated mast cell degranulation
- Inhibition of B-cell signaling

### XmAb® ANTIBODY PLATFORM GENERATES DIFFERENTIATED ANTIBODIES

Antibody engineering can enhance or add new functionalities to antibodies. By changing just a couple of amino acids in the effector domains on Fc regions, Xencor's platform enhances and modulates various properties of antibodies while retaining their basic structure and function.

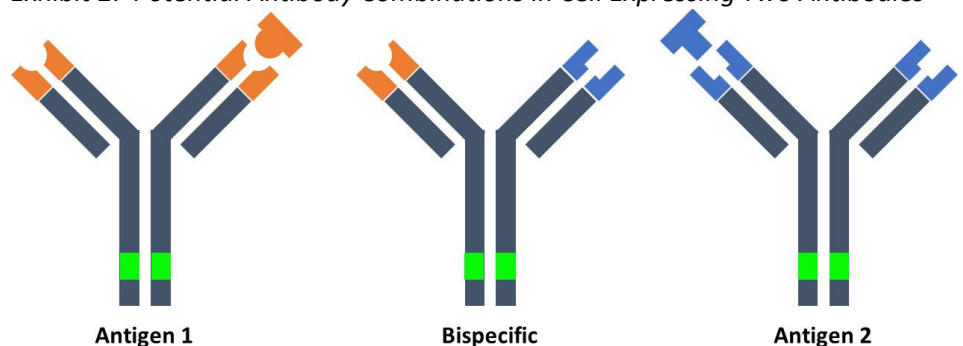
- 1.) **Cytotoxic Fc domain** – improved binding to activating Fc receptors found on Natural Killer Cells and Macrophages; recruits these cells and triggers them to kill a pathogen or cancer cell.
- 2.) **Immune Inhibitor Fc Domain** – tighter binding to inhibitory Fc receptors found on B-cells; suppresses hyper-active B-cells in conditions such as allergy, asthma and autoimmunity.
- 3.) **Xtend Fc Domain** – Higher affinity binding to FcRn receptors of endothelial cells lining blood vessels; rescues antibodies from proteolytic degradation, resulting in a longer half-life in the patient.
- 4.) **Bispecifics** – antibodies with two different variable domains; can be used to tie two different cell types together, crosslink different types of receptors on the cell surface, or deliver a drug to a target cell

Xencor's modified Fc domains can be swapped onto different variable domains, enabling designer modification of antibody characteristics for any antibody under development. We believe Xencor's existing 7 partnerships (Morphosys, Boehringer Ingelheim, CSL, Janssen, Merck, and Alexion) strongly validate its platform and intellectual property and that multiple additional partnerships are likely to follow.

#### Bispecifics

Using recombinant DNA technologies, scientists can express two different antibodies in the same cell, though this creates 3 potential combinations, only one of which is desirable (See Exhibit 2).

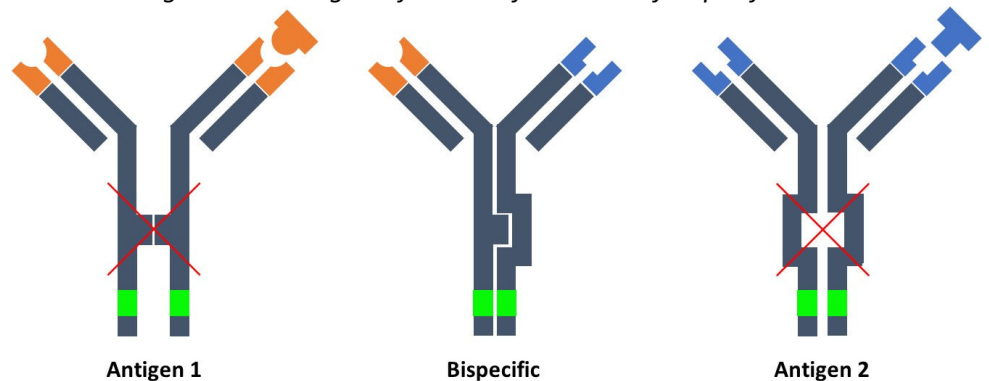
*Exhibit 2. Potential Antibody Combinations in Cell Expressing Two Antibodies*



Source: MLV & Co research

Additionally, bispecific antibodies are often unstable, further reducing production yield and shortening half-life in the patient. Xencor's Fc modifications enable preferential formation of the bispecific antibody and increase stability (Exhibit 3).

*Exhibit 3. Engineered Fc regions favor the formation of bispecifics*



Source: MLV & Co research

## PLATFORM GENERATES RICH PIPELINE

### Partnered Lead Candidates XmAb5871 and XmAb5574 Target CD19

*Using anti-CD19 antibodies offers an as yet unexploited way to target B cells, and XNCR's anti-CD19s are leading the way*

Partnered with Amgen and Morphosys, XNCR's two anti-CD19 are in Phase 2 development. CD19 is a pan-B-Cell marker expressed from the earliest stages of B-cell development through blasts, making it a logical target for B-cell therapies, much in the same way as anti-CD20 specific antibodies like Rituximab do. However, no anti-CD19 specific antibodies are currently on the market. Early clinical studies in B-cell non-Hodgkin's lymphoma, using a conventional anti-CD19 mAb, did not yield durable responses and CD19 antibody coated cancer blasts remained in circulation for days (Hekman, CII, 1991). However, the enhanced potency of next generation antibody technologies has renewed interest in CD19 as a target. Indeed, over a dozen companies are developing anti-CD19 antibodies. XNCR's XmAb5871 and XmAb5574/MOR208 are poised to be one of the first to gain approval.

#### ***XmAb5871 – Immune Inhibitor Fc***

Partnered with Amgen and currently in Phase 2 clinical testing for rheumatoid arthritis (RA), XmAb5871 has an Fc domain that binds to the inhibitory FcγRIIb receptor found on B-cells and suppresses B-cell mediated autoimmunity and inflammation.

*Phase 2 XmAb5871 RA data expected in 4Q14*

Anti-CD20 Rituxan is approved for treating RA, providing proof-of-concept for B-cell targeting therapies. While Rituxan marks B cells for destruction by the immune system, XmAb5871 suppresses B cell activation. As a result, patients treated with XmAb5871 experience lower and more transient decreases in their B-cell counts, thereby rendering them less susceptible to Rituxan's immunosuppression associated adverse events including progressive multifocal leukoencephalopathy (PML). **Though the ongoing Phase 2 XmAb5871 trial is in**

RA, providing a quick path to proof-of-principle, we note XmAb5871 can be developed to treat any disease of hyperactive B-cells, including systemic lupus erythematosus (SLE), multiple sclerosis (MS), pemphigus, and Sjorgren's syndrome.

#### ***XmAb5574 (MOR208) – Cytotoxic Fc***

*Phase 2 XmAb5574 NHL data expected at ASH*

Developed by Morphosys and currently in Phase 2 testing for oncology, XmAb5574 uses a cytotoxic Fc domain to enhance the killing of malignant B-cells of lymphoma or leukemia.

XmAb5574's Fc domain increases its ability to induce antibody dependent cell-mediated cytotoxicity, which we believe should allow it to surmount the limitations of the first generation anti-CD19 antibodies. Some B-cell lymphomas and leukemias, such as chronic lymphocytic leukemia (CLL), express low levels of CD20, rendering Rituxan less efficacious but could potentially be targeted by CD19 antibodies. Additionally, anti-CD19 antibodies could address patients relapsing on or refractory to CD20 therapies. **A Phase 1 study of single-agent XmAb5574 indicated it induced partial response in 67% of CLL patients who had failed on a previous anti-CD20 therapy (Woyach, Blood, 2014). This compares favorably with the 57% RR generated by monotherapy ofatumumab in patients refractory to fludarabine and alemtuzumab (Wierda, JCO, 2010).**

#### **Seven Licensed Products Are Worth \$6/Share in Aggregate**

Currently, XNCR has rights to 7 partnered drugs in development. We estimate these account for a total of \$6/share of our \$15/share valuation, and therefore represent a significant monetary value to XNCR. Our valuation for each partnered pipeline candidate is derived by probability-adjusting XNCR's shared peak sales and milestones discounted back 10% over a period from estimated drug approval year.

#### ***XmAb5871– Anti-CD19 Inflammation – \$2/share***

Amgen (AMGN, NR) has an opt-in right to XmAb5871, until it receives Phase 2 proof-of-concept data in 2H16. We expect AMGN will pay the remaining \$12M development milestones and include these in our income statement. Since anti-CD20 antibody Rituxan generated \$1.6B in inflammation sales in 2013, and since CD19 targets a slightly larger proportion of B cells, we think peak sales could reach one quarter that of Rituxan, or \$400M. We assign a 26% probability of approval, which we think is appropriate for a Phase 2 product candidate and assume launch in 2021 and 13% royalty rate.

We note AMGN recently and aggressively managed its inflammation R&D pipeline expense by outlicensing all programs. While it is difficult to determine whether AMGN would opt into XmAb, we note that should AMGN fail to exercise its option, all rights revert back to XNCR without any further obligations by either party. In our view, this scenario would be advantageous to XNCR.



***XmAb5574 (MOR208) – Anti-CD19 Oncology – \$2/share***

We think peak sales of XmAb5574 could reach one third that of the \$6.3B Rituxan generated in oncology sales, or \$2.1B because of its profile and position as the leading anti-CD19 in oncology development. We assign a 26% probability of approval, which we think is appropriate for a Phase 2 product candidate, and assume launch in 2019 and 11% royalty rate.

***Oncologic Focus: BI 836858, BI 836826, CSL362***

XNCR partnered with Boehringer Ingelheim (BI, NR) for the Phase I, anti-CD33 drug BI 836858 and for the Phase I, anti-CD37 drug BI 836826. The former is targeting indications in AML and MDS, while the latter is focused on NHL and CLL. Given their Phase I status we expect both drugs to have a 21% probability of making it to market, with an expected approval date in 2021. We estimate a royalty rate of 3%. BI 836858 is being developed for the AML market, for which we estimate peak ~\$500M WW sales. We believe BI 836826 peak sales could reach \$525MM in peak sales (a quarter of MOR208's peak sales) due to its 2-year delay to the NHL/CLL arena. Another partnership with Johnson & Johnson and CSL for the anti-CD123 drug CSL362 in the AML space should provide revenues similar to BI 836858.

***Autoimmune Focus: Partnerships with MRK and JNJ***

XNCR has negotiated a partnership with Merck (MRK, NR) for an undisclosed autoimmune disorder drug currently in Phase I. With an expected 2021 approval and a 21% chance of making it to market, we anticipate peak sales could reach \$400MM for this drug, with 3% royalties for XNCR. Similar peak revenues could also be obtained for another undisclosed autoimmune drug (preclinical, 10% chance of approval, expected 2025 approval) that is partnered with Johnson & Johnson (JNJ, NR).

***Hematology Focus: Partnerships with ALXN and CSL***

Two more tech license partnerships for undisclosed preclinical drugs have been struck by XNCR in the hematology space: one with Alexion (ALXN, NR) for hemolysis and clotting, and one with CSL. We expect the partnered ALXN drug to have a 10% chance of approval (expected 2023) and have the potential to reach \$800MM peak sales, representing half the current sales of ALXN's Soliris. For the CSL-partnered hematology drug, we expect approval in 2025, with peak sales of ~\$400MM.

**Unpartnered Lead Candidate XmAb7195 Is a Next Generation Anti-IgE**

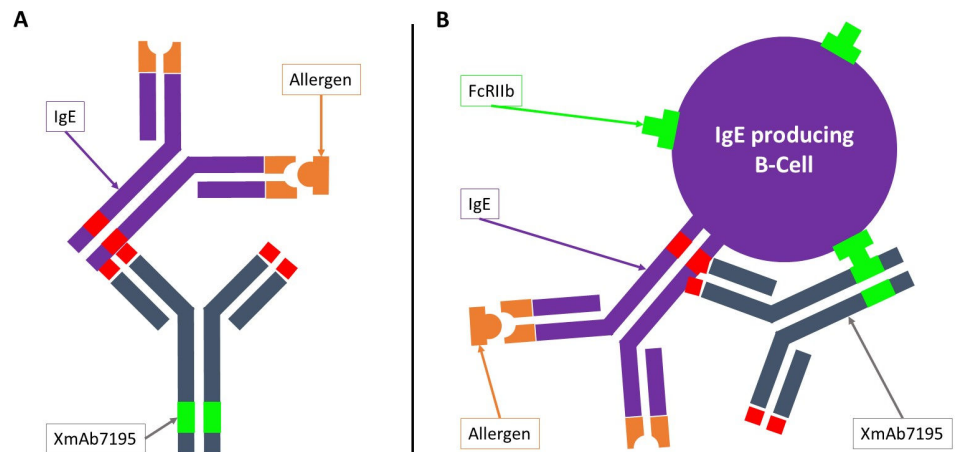
XmAb7195 has a variable domain that recognizes IgE and an engineered Fc domain that suppresses B-cell activation. IgE is a type of antibody important in allergy and asthma, and the IgE's Fc region binds to activating Fc receptors found on mast cells and basophils that release pro-inflammatory molecules, including histamines, leukotrienes, and interleukins. This proinflammatory cascade leads to the physiological responses of allergy and asthma, such as airway constriction, mucus production, and changes in vascular permeability that in extreme cases can lead to the fatal drop in blood pressure of anaphylaxis.

***Phase 1a XmAb7195 IgE reduction data expected in January 2015***

XmAb7195 has two modes of action for suppressing allergic reactions:

- 1) binds to IgE in blood, preventing IgE from binding to mast cells or basophils and removing it from circulation (Exhibit 4A).
- 2) inhibits the B-cells that make IgE via its modified effector domain and binds tightly to an inhibitory Fc receptor (FcRIIb) found on B-cells (Exhibit 4B).

*Exhibit 4. Schematic of Xencor's Bispecific Technology*



Source: MLV & Co research

#### ***Xolair Is First Generation Anti-IgE***

The mechanism of action for XmAb7195 is similar to that of commercially successful omalizumab (Xolair, \$1.2B in 2013 sales, Roche/Genentech (ROG, NR)). Like omalizumab, XmAb7195 binds IgE in serum and prevents interaction with mast cells and basophils. However, XmAb7195 delivers a much more potent inhibitory signal through FcRIIb, which should shut down allergen specific B-cells that are producing IgE in the first place. **We think XmAb7195's effect on the IgE feedback loop likely increases its efficacy and allows XmAb7195 to address a broader patient population.** In animal models, XmAb7195 does suppress circulating IgE levels more effectively than Xolair (Chu, JACI, 2011).

#### ***Asthma antibody competition for XmAb7195 is mixed***

Other monoclonal antibody therapies for asthma include benralizumab (AstraZeneca, AZN, NR), mepolizumab (GlaxoSmithKline, GSK, NR) and reslizumab (Teva, TEVA, NR), all of which target IL-5 and demonstrated efficacy in Phase 3 trials focused on asthma with elevated eosinophils. While severe allergic asthma tends to exhibit both eosinophilia and elevated IgE levels, it is not clear that these therapeutics are competing for the same patient populations. In fact, the phase 3 mepolizumab data showed baseline IgE and atopic status were not associated with a response (Pavord, Lancet, 2012).

Potentially more problematic for Xencor are Genentech's quilizumab and Novartis's (NVE, NR) QGE031. Quilizumab is a mAb directed against membrane bound IgE and designed to eliminate the IgE producing B-cells. In a Phase 1b allergic rhinitis and a Phase 2a mild allergic asthma trials, quilizumab did not reduce IgE levels to the degree anticipated based on mouse models. However,



after three doses, it did reduce early asthmatic responses by 26% and late asthmatic responses by 36% compared to placebo, although this was only significant in the former ( $p=.046$  and  $p=0.21$ , respectively).

QGE031 is simply another anti-IgE antibody, similar to omalizumab, but with a higher affinity that has completed Phase 1 trials in allergic asthma and in atopic patients and is currently in Phase 2 trials. Atopic dermatitis, or eczema, is an IgE-mediated skin condition. In atopic dermatitis studies, QGE031 suppressed wheal formation by an allergen by >95% when administered at 2mg/kg ( $n=31$ ) as compared to 41% for omalizumab ( $p<0.001$ ).

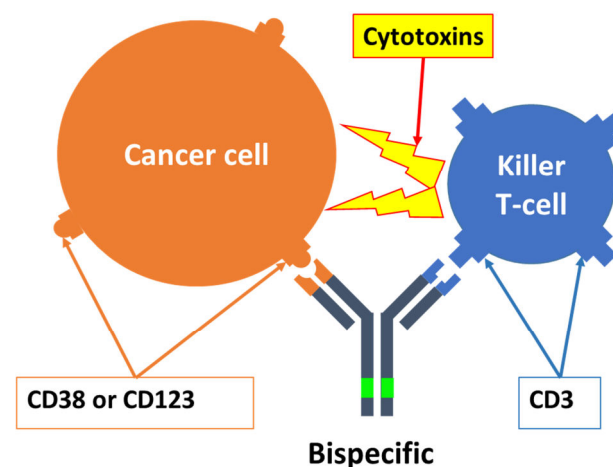
Another antibody in Phase 2 for eosinophilic asthma is dupilumab (Regeneron, REGN, /Sanofi, SNY, NR) which binds the IL-4 receptor- $\alpha$  and blocks signaling by IL-4 and IL-13. IL-4 and IL-13 induce B-cells to class switch to IgE production. Thus, while it has a distinct mechanism of action, dupilumab should affect IgE production. It may particularly replicate the effect of quilizumab, in the sense that it blocks new IgE production, but does nothing to clear existing IgE or IgE production by plasma cells in the bone marrow. Since XmAb7195 combines the functions of omalizumab/QGE031 and quilizumab/dupilumab, we believe it has the potential to emerge as a superior product.

## PRECLINICAL UNPARTNERED PIPELINE

### *Bispecific antibodies for cancer therapies*

Xencor's portfolio includes three bispecific antibodies for hematological malignancies (CD3xCD38, CD3xCD123, and CD20xCD123). All three of these antibodies are designed to link effector T-cells from the immune system to cancer cells (Exhibit 5).

**Exhibit 5.** Bispecific Antibodies Effect Killing of Cancer Cells by Immune System



Source: MLV & Co research

When T-cells get activated, they can release proinflammatory cytokines (helper T-cells) or release cytotoxic proteins (killer T-cells) that kill the cell they are linked to. Each bispecific antibody has one arm that reacts to CD3, a protein

that is part of the T-cell receptor signaling-complex found on helper T-cells and killer T-cells. The other arm reacts to antigens found on specific kinds of cancer cells, such as

- CD123 found on AML blasts,
- CD38, which is expressed on multiple myeloma cells, and
- CD20 which is found on B-cell leukemias and lymphomas including NHL and CLL.

These bispecific antibodies can activate T-cells while linking them to a cancer cell. The effector T-cell will “think” that it is specific for the cancer cell, and will release cytotoxins to kill the cancer cell. Thus, unlike a true immunization, bispecific antibodies can activate any T-cell that comes into contact with a cancer cell, regardless of its inherent antigen specificity. Consequently, bispecific antibodies can harness existing effector cells without waiting for antigen specific immunity to develop. This mode of action may also circumvent some of the inhibitory stimuli produced by cancers that prevent an anti-cancer response from developing in the first place

## INTELLECTUAL PROPERTY

Xencor currently owns or has exclusive license on 50 patents in the US and another 83 pending. Ex-US, they hold 126 patents, with 113 pending. These patents cover XmAb Fc domains, clinical and preclinical stage antibodies, and computational protein design methods. These patents will expire in the US 2023 - 2031. Xencor has said that they have U.S. composition of matter patents covering three lead product candidates (one for XmAb5574/MOR208, two for XmAb5871 and two for XmAb7195) relating to both XmAb Fc domains and individual product candidates. These patents will expire in the US 2027 - 2030.

## CATALYSTS

Over the next 12-18 months, we expect multiple data points for multiple products (See Exhibit 6).

### Exhibit 6: Upcoming Catalysts

| Timing | Drug            | Milestone                                      |
|--------|-----------------|--|
| 4Q14   | XmAb5574/MOR208 | Ph2 NHL data                                   |
| 4Q14   | XmAb5871        | Ph1b/2a top line data                          |
| 4Q14   | Bispecific      | Preclinical data                               |
| 2014   |                 | Additional technology licensing deals          |
| 2014   |                 | Additional partner milestones                  |
| 1Q15   | XMAb7195        | Ph 1a IgE reduction data                       |
| 1H15   | XMAb7195        | Phase 1b trial initiation                      |
| 1H15   | XmAb5871        | Initiate Phase 2b in Rheumatoid Arthritis      |
| 2H15   | XMAb7195        | Phase 1b trial multiple ascending dose results |
| 2015   | Bispecific      | Initiate IND enabling studies                  |

Source: Company reports, MLV & Co. estimates.

## Company Description

Xencor is a Monrovia, California based company developing antibody therapies. Using their XmAb antibody engineering platform, they have developed a catalog of antibody effector domains that modify the functionality of monoclonal antibodies. This functionality can easily be incorporated into new or existing antibodies. Xencor has taken advantage of this flexibility both to develop their own lead candidates and to license out their proprietary effector domains. As a result Xencor currently has seven antibodies in clinical development either internally or in partnership with leading biopharmaceutical companies including Amgen, Morphosys, Boehringer Ingelheim, Janssen, and Merck.

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## Management Team and Board of Directors

Xencor's management team brings together vibrant innovators and seasoned professionals in the biopharmaceutical industry. In our view, they have assembled the necessary depth of business and clinical experience to support the expansion of the XmAb platform into new therapeutic applications.

**Bassil I. Dahiyat, PhD. President and Chief Executive Officer, Director.** Dr. Dahiyat's appreciation of the commercial potential of engineered proteins led him to cofound Xencor in 1997. Dr. Dahiyat continues to be deeply involved in the scientific development at Xencor and is listed as an inventor on 60 patents and patent applications, including Xencor's Protein Design Automation® platform. Dr. Dahiyat has raised >\$85MM in funding and assembled a team of researchers, clinicians and individuals from the biotech industry to guide Xencor.

**Bruce L.A. Carter, PhD. Chairman of the Board, Director.** Appointed Chairman of the Board of Xencor, Inc. in 2009, Dr. Carter has extensive experience on the board of several companies: Immune Design Corp., Moksha8, QLT, Inc., and TB Alliance, to name a few. Prior to that, Dr. Carter developed extensive upper management experience as the CEO of ZymoGenetics from 1998 - 2009.

**Paul Foster, MD. Chief Medical Officer.** Prior to joining Xencor in 2010, Dr. Foster had almost 30 years of experience in research and product development and commercialization. He was formerly the CMO of Cardium Therapeutics and the SVP and CMO of Development at Strategic Consulting Associates, LLC.

**John R. Desjarlais, PhD. Senior VP, Research and Chief Scientific Officer.** Prior to his role at Xencor, Dr. Desjarlais held an Assistant Professorship of Chemistry at Penn State University and developed a protein engineering method similar to Xencor's PDA technology platform.

**Edgardo Baracchini, PhD. Chief Business Officer.** Holding the position of CBO since 2010, Dr. Baracchini has over 15 years of experience in developing business relationships for pharmaceutical firms. He has held vice president positions at Metabasis Therapeutics and Elitra Pharmaceuticals, as well as director of business development at Agouron Pharmaceuticals.

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**FINANCIALS AND VALUATION****Commercialization Assumptions for Wholly Owned Programs**

**7195:** We estimate 7195 will launch in the US in 2022. Our model assumes 7195 will be priced similarly to Xolair at \$15,000 per year in the US, with a 60% discount in the EU, and parity in Japan. We assume XNCR will develop 7195 through Phase 2 then out-license it for Phase 3 development and commercialization. We assume XNCR will receive a 20% royalty on future sales.

**Valuation: Probability-Weighted Valuation of Pipeline Assets and Partnerships**

XNCR has several candidates in the development pipeline. We derive a value of \$15 per XNCR common share based on a probability-adjusted sum-of-the-parts analysis. We estimate wholly owned lead product candidate 7195 is worth \$8 per share. We also value all partnered programs at \$6 based on our estimates of peak sales potential, launch timing, and stage of development. Lastly, cash on hand comprise the remaining \$1 of our valuation of XNCR shares.

This valuation methodology takes into account the expected after-tax profits over 4Q14-2030, adjusted for likelihood of 7195 reaching the market. For 7195, which is expected to complete a Phase 1 trial in 2015, we assume a 33% cumulative probability (95% Phase 1 success, 65% Phase 2 success, 60% Phase 3 success, 95% FDA approval, 95% marketing), which we think is appropriate given the clinical stage of development and the fact that Xolair has already validated anti-IgE based strategies. We forecast after-tax profit streams through 2030, adjusted for the probability of reaching the market, as well as a 2030 terminal value (which assumes zero terminal growth rate). We discount these probability-adjusted profit streams back at a 10% rate. We note that our estimates assume \$17.5 million of R&D spending from 2022-2030. This is our estimate for R&D spending on other candidates in development, but we include no contribution from them to our valuation. Because of their early stage of development, their probability-adjusted contribution would be small.

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**INVESTMENT RISKS AND RISKS TO PRICE TARGET**

Risks to our outlook include clinical and regulatory delays, intellectual property, commercialization risk, and post-regulatory approval drug safety warnings.

**Clinical and regulatory risk.** XNCR is a development stage company that has yet to attain regulatory approval for any drug candidate, and it is possible it may never do so. Currently, 7195 is in Phase 1 trials. We assume that data will be sufficient to further develop 7195 as a next generation Xolair. Similarly, we assume that XNCR's partners will actively develop their respective products. Drug candidates could fail to show sufficient risk/benefit profiles to support regulatory approval. Additional information and/or additional trials could be required by regulators to address any safety or efficacy concerns. If this were to occur, this could significantly delay revenue generation going forward, and could materially impact our forecasts.

**Commercial and partnership risk.** XNCR is a lean company and does not currently have a sales force. For 7195, XNCR may seek a partner with manufacturing and/or marketing capabilities. XNCR could be unable to generate the revenues we forecast. Lack of uptake by physicians, patients or payers due to more efficacious and/or easier to adhere to treatment options will also affect our revenue projections and thus, our valuation.

**Financing risk.** Currently, XNCR is cash-flow negative, and therefore is likely to require additional funding. Our model includes a partnership, but we also believe XNCR needs to raise cash in the capital markets before first drug approval. This would dilute current shareholders and lower expected returns for investors.

**Intellectual property risk.** XNCR's 176 issued patents may be invalidated or expire, allowing additional competitors to enter their markets.

**Post-regulatory approval drug safety warnings.** We believe 7195 is a potential candidate to compete with Xolair. In 2007, four years after approval, FDA changed the Xolair label to add a black box warning for anaphylaxis. A black box warning could also negatively impact uptake by physicians and patients.

**Xencor, Inc. (XNCR) Probability Based Valuation Summary**

| Drug                            |                  | Peak Sales (\$ MM) | Stage | (Estimated) Launch | Probability of Reaching Market | XNCR Share | Probability Adjusted NPV | Per Share Value |
|---------------------------------|------------------|--------------------|-------|--------------------|--------------------------------|------------|--------------------------|-----------------|
| Wholly Owned Programs in Clinic |                  | \$2,288            | Phase |                    |                                |            | \$296                    | \$8             |
| XmAb7195 (anti-IgE)             |                  | \$2,288            | 1a    | 2022               | 33%                            | 20%        | \$296                    | \$8             |
| Partnered Programs              | Drug             | \$6,025            | Phase |                    |                                |            | \$219                    | \$6             |
| AMGN Autoimmune (anti-CD19)     | XmAb5871         | \$400              | 2     | 2021               | 26%                            | 13%        | \$77                     | \$2             |
| MOR Oncology (anti-CD19)        | XmAb5574         | \$2,100            | 2     | 2019               | 26%                            | 11%        | \$94                     | \$2             |
| BI Oncology (anti-CD33)         | BI 836858        | \$500              | 1     | 2021               | 21%                            | 3%         | \$5                      | \$0.13          |
| BI Oncology (anti-CD37)         | BI 836826        | \$525              | 1     | 2021               | 21%                            | 3%         | \$5                      | \$0.13          |
| JNJ/CSL Oncology (anti-CD123)   | CSL362           | \$500              | 1     | 2021               | 21%                            | 3%         | \$12                     | \$0.31          |
| MRK Autoimmune                  | MRK Autoimmune   | \$400              | 1     | 2021               | 21%                            | 3%         | \$3                      | \$0.06          |
| ALXN Undisclosed                | ALXN Undisclosed | \$800              | PC    | 2023               | 10%                            | 3%         | \$20                     | \$0.50          |
| JNJ Autoimmune                  | JNJ Autoimmune   | \$400              | PC    | 2025               | 10%                            | 3%         | \$1                      | \$0.02          |
| CSL Hematology                  | CSL Hematology   | \$400              | PC    | 2025               | 10%                            | 3%         | \$2                      | \$0.05          |
| TOTAL                           |                  | \$8,313            |       |                    |                                |            | \$515                    | \$13            |

**Cash**

|                        |             |            |
|------------------------|-------------|------------|
| <b>Cash (12/31/14)</b> | <b>\$58</b> | <b>\$1</b> |
|------------------------|-------------|------------|

Total firm value **\$572**

**Debt****Face (\$MM)**

|                   |            |
|-------------------|------------|
| <b>Total Debt</b> | <b>\$0</b> |
|-------------------|------------|

|                   |          |
|-------------------|----------|
| Discount Rate     | 10.0%    |
| Time of Valuation | 10/22/14 |

|                                 |              |
|---------------------------------|--------------|
| Equity value                    | <b>\$572</b> |
| Shares Outstanding YE 2030 (MM) | <b>39.1</b>  |
| Equity value per share          | <b>\$15</b>  |

Note: numbers may not add due to rounding.

Sources: Company reports and MLV & Co. estimates.



## Xencor, Inc. (XNCR) - XmAb7195 Probability-Weighted Discounted Earnings Valuation (\$MM, expect per share amounts)

|                               |                  |
|-------------------------------|------------------|
| Discount Rate                 | 10.0%            |
| <b>Probability of Success</b> | <b>Per Stage</b> |
| Preclinical                   | 100%             |
| Phase I                       | 95%              |
| Phase II                      | 65%              |
| Phase III                     | 60%              |
| FDA                           | 95%              |
| Market                        | 95%              |
| Cumulative                    | 33.4%            |

| PROBABILITY- ADJUSTED           | 2H14E | 2015E | 2016E | 2017E | 2018E | 2019E | 2020E | 2021E | 2022E | 2023E | 2024E | 2025E | 2026E | 2027E | 2028E | 2029E | 2030E |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Royalty Revenue Forecast (\$MM) | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 19.6  | 74.7  | 161.5 | 276.9 | 340.4 | 385.2 | 413.1 | 434.7 | 457.6 |
| Milestone Forecast              | 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   | 0.0   |

| Stage              | Phase I     | Phase II    | Phase II    | Phase III   | Phase III   | FDA         | Market      | Market      | Market      | Market      | Market      | Market      | Market      | Market      | Market      | Market      | Market      |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 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         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| R&D                | 8.4         | 16.8        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        | 17.5        |
| SG&A               | 3.4         | 6.9         | 7.1         | 7.3         | 7.6         | 7.8         | 8.0         | 8.3         | 8.5         | 8.8         | 9.0         | 9.3         | 9.6         | 9.9         | 10.2        | 10.5        | 10.8        |
| <b>Total Costs</b> | <b>11.8</b> | <b>23.7</b> | <b>24.6</b> | <b>24.8</b> | <b>25.1</b> | <b>25.3</b> | <b>25.5</b> | <b>25.8</b> | <b>26.0</b> | <b>26.3</b> | <b>26.5</b> | <b>26.8</b> | <b>27.1</b> | <b>27.4</b> | <b>27.7</b> | <b>28.0</b> | <b>28.3</b> |

| Stage                     | Phase I | Phase II | Phase II | Phase III | Phase III | FDA    | Market | Market | Market | Market | Market | Market | Market | Market | Market | Market | Market | Terminal value at 2030 | Assumed growth rate |
|---------------------------|---------|----------|----------|-----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------------|---------------------|
| Probability               | 33%     | 33%      | 33%      | 33%       | 33%       | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    | 33%    |                        | 0%                  |
| Prob. Adjusted Revenue    | 0.0     | 0.0      | 0.0      | 0.0       | 0.0       | 0.0    | 0.0    | 0.0    | 6.5    | 25.0   | 54.0   | 92.6   | 113.8  | 128.8  | 138.1  | 145.4  | 153.0  |                        |                     |
| Prob. Adjusted Total Cost | 3.9     | 7.9      | 8.2      | 8.3       | 8.4       | 8.5    | 8.5    | 8.6    | 8.7    | 8.8    | 8.9    | 9.0    | 9.1    | 9.1    | 9.2    | 9.4    | 9.5    |                        |                     |
| Effective tax rate        | 0%      | 0%       | 0%       | 0%        | 0%        | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     | 35%    | 35%    | 35%    | 35%    | 35%    | 35%    |                        |                     |
| Prob. Adjusted Profits    | (3.9)   | (7.9)    | (8.2)    | (8.3)     | (8.4)     | (8.5)  | (8.5)  | (8.6)  | (2.1)  | 16.2   | 45.1   | 54.4   | 68.1   | 77.8   | 83.8   | 88.4   | 93.3   | 933.1                  |                     |
| Shares (MM)               | 31.4    | 31.4     | 31.4     | 33.1      | 34.9      | 36.4   | 37.9   | 37.9   | 37.9   | 39.1   | 39.1   | 39.1   | 39.1   | 39.1   | 39.1   | 39.1   | 39.1   |                        |                     |
| Per Share                 | (0.13)  | (0.25)   | (0.26)   | (0.25)    | (0.24)    | (0.23) | (0.23) | (0.23) | (0.06) | 0.41   | 1.15   | 1.39   | 1.74   | 1.99   | 2.14   | 2.26   | 2.39   | 23.87                  |                     |

|  |        |        |        |        |        |        |        |        |        |      |       |       |       |       |       |       |       |        |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|-------|-------|-------|-------|-------|-------|-------|--------|--|
| Line 1: Present Value of Probability Adjusted Profits (\$MM) | (3.93) | (7.07) | (6.66) | (6.10) | (5.59) | (5.12) | (4.69) | (4.30) | (0.97) | 6.67 | 16.85 | 18.42 | 20.94 | 21.72 | 21.23 | 20.35 | 19.50 | 194.95 |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|-------|-------|-------|-------|-------|-------|-------|--------|--|

|  |        |        |        |        |        |        |        |        |        |      |      |      |      |      |      |      |      |      |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|--|
| Line 2: Present Value of Probability Adjusted Profits/Share (\$MM) | (0.13) | (0.23) | (0.21) | (0.18) | (0.16) | (0.14) | (0.12) | (0.11) | (0.03) | 0.17 | 0.43 | 0.47 | 0.54 | 0.56 | 0.54 | 0.52 | 0.50 | 4.99 |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|--|

|   |         |             |      |            |        |
|---|---------|-------------|------|------------|--------|
| Probability-Adjusted NPV- Line 1 (\$MM) | \$296.2 | 30E Shares: | 39.1 | NPV/Share: | \$7.58 |
|---|---------|-------------|------|------------|--------|

|  |         |
|--|---------|
| NPV of Prob. Adj. Profits per share - Line 2 | \$ 7.40 |
|--|---------|

|                   |          |
|-------------------|----------|
| Time of Valuation | 10/22/14 |
|-------------------|----------|

Sources: Company reports and MLV & Co. estimates.

**XNCR Partner Valuation**

| Phase | Partner | Drug Code        | Target | Indications                   | Fc Domain  | Agreement          | Peak Sales (\$MM) | Approval Year | Roy. Rate | Remaining Milestones (\$MM) |
|-------|---------|------------------|--------|-------------------------------|------------|--------------------|-------------------|---------------|-----------|-----------------------------|
| 2     | AMGN    | XmAb5871         | CD19   | RA, autoimmune                | inhibitory | WW co-development  | 400               | 2021          | 13%       | 475                         |
| 2     | MOR     | XmAb5574         | CD19   | Oncology (CLL, NHL, ALL)      | ADCC       | WW co-development  | 2,100             | 2019          | 11%       | 299                         |
| 1     | BI      | BI 836858        | CD33   | Oncology (AML, MDS cytotoxic) | ADCC       | Technology license | 500               | 2021          | 3%        | 27                          |
| 1     | BI      | BI 836826        | CD37   | Oncology (NHL, CLL cytotoxic) | ADCC       | Technology license | 525               | 2021          | 3%        | 27                          |
| 1     | JNJ CSL | CSL362           | CD123  | Oncology (AML-ADCC)           | ADCC       | Technology license | 500               | 2021          | 3%        | 89                          |
| 1     | MRK     | MRK Autoimmune   | NA     | Autoimmune                    | stability  | Technology license | 400               | 2021          | 3%        | 10                          |
| PC    | ALXN    | ALXN Undisclosed | NA     | hemolysis and clotting        | Xtend      | Technology license | 800               | 2023          | 3%        | 399                         |
| PC    | JNJ     | JNJ Autoimmune   | NA     | Autoimmune                    | Xtend      | Technology license | 400               | 2025          | 3%        | 10                          |
| PC    | CSL     | CSL Hematology   | NA     | Hematology                    | Xtend      | Technology license | 400               | 2025          | 3%        | 37                          |

Source: MLV & Co. estimates.

| US Asthma   | 2012  | 2013  | 2014E | 2015E | 2016E | 2017E | 2018E | 2019E | 2020E | 2021E | 2022E        | 2023E         | 2024E         | 2025E         | 2026E           | 2027E           | 2028E           | 2029E           | 2030E           |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Adult Asthmatics in US (MM)                               | 18.7  | 19.3  | 19.8  | 20.4  | 21.0  | 21.6  | 22.3  | 22.9  | 23.6  | 24.3  | 25.0         | 25.8          | 26.5          | 27.3          | 28.1            | 29.0            | 29.8            | 30.7            | 31.6            |
| Growth rate   | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96%        | 2.96%         | 2.96%         | 2.96%         | 2.96%           | 2.96%           | 2.96%           | 2.96%           | 2.96%           |
| % adults receiving treatment                              | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%          | 53%           | 53%           | 53%           | 53%             | 53%             | 53%             | 53%             | 53%             |
| Adults receiving treatment                                | 9.9   | 10.2  | 10.5  | 10.8  | 11.1  | 11.5  | 11.8  | 12.2  | 12.5  | 12.9  | 13.3         | 13.7          | 14.1          | 14.5          | 14.9            | 15.3            | 15.8            | 16.3            | 16.7            |
| % patients with Moderate-Severe asthma                    | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%          | 36%           | 36%           | 36%           | 36%             | 36%             | 36%             | 36%             | 36%             |
| Patients with Severe Asthma (000s)                        | 3,568 | 3,674 | 3,782 | 3,894 | 4,009 | 4,128 | 4,250 | 4,376 | 4,505 | 4,638 | 4,776        | 4,917         | 5,062         | 5,212         | 5,366           | 5,525           | 5,688           | 5,857           | 6,030           |
| % Uncontrolled  | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%          | 20%           | 20%           | 20%           | 20%             | 20%             | 20%             | 20%             | 20%             |
| Patients with Uncontrolled Severe Asthma (000s)           | 714   | 735   | 756   | 779   | 802   | 826   | 850   | 875   | 901   | 928   | 955          | 983           | 1,012         | 1,042         | 1,073           | 1,105           | 1,138           | 1,171           | 1,206           |
| % patients with elevated IgE levels                       | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%          | 67%           | 67%           | 67%           | 67%             | 67%             | 67%             | 67%             | 67%             |
| IgE-eligible patients                                     | 476   | 490   | 504   | 519   | 535   | 550   | 567   | 583   | 601   | 618   | 637          | 656           | 675           | 695           | 715             | 737             | 758             | 781             | 804             |
| % Xolair Ineligible due to Weight or IgE Level            | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%          | 25%           | 25%           | 25%           | 25%             | 25%             | 25%             | 25%             | 25%             |
| Patients Ineligible for Xolair due to Weight or IgE Level | 119   | 122   | 126   | 130   | 134   | 138   | 142   | 146   | 150   | 155   | 159          | 164           | 169           | 174           | 179             | 184             | 190             | 195             | 201             |
| XmAb 7195 Penetration in Xolair Ineligible                |       |       |       |       |       |       |       |       |       |       | 2.5%         | 8.0%          | 15.0%         | 19.0%         | 20.0%           | 20.0%           | 20.0%           | 20.0%           | 20.0%           |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       | 4            | 13            | 25            | 33            | 36              | 37              | 38              | 39.04           | 40              |
| Annual Price (\$000s)                                     |       |       |       |       |       |       |       |       |       |       | \$ 15.000    | \$ 15.450     | \$ 15.914     | \$ 16.391     | \$ 16.883       | \$ 17.389       | \$ 17.911       | \$ 18.448       | \$ 19.002       |
| <b>XmAb 7195 Adult Xolair Ineligible Revenue (\$MM)</b>   |       |       |       |       |       |       |       |       |       |       | <b>\$ 60</b> | <b>\$ 203</b> | <b>\$ 403</b> | <b>\$ 541</b> | <b>\$ 604</b>   | <b>\$ 640</b>   | <b>\$ 679</b>   | <b>\$ 720</b>   | <b>\$ 764</b>   |
| XmAb 7195 Penetration in Xolair Eligible                  |       |       |       |       |       |       |       |       |       |       | 0.4%         | 1.0%          | 1.5%          | 4.0%          | 4.5%            | 5.0%            | 5.0%            | 5.0%            | 5.0%            |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       | 2.55         | 7             | 10            | 28            | 32              | 37              | 38              | 39              | 40              |
| <b>XmAb 7195 Adult Xolair Eligible Revenue (\$MM)</b>     |       |       |       |       |       |       |       |       |       |       | <b>\$ 38</b> | <b>\$ 101</b> | <b>\$ 161</b> | <b>\$ 456</b> | <b>\$ 544</b>   | <b>\$ 640</b>   | <b>\$ 679</b>   | <b>\$ 720</b>   | <b>\$ 764</b>   |
| <b>Xolair US Revenue in Adult Allergic Asthma</b>         |       |       |       |       |       |       |       |       |       |       | <b>\$ 98</b> | <b>\$ 304</b> | <b>\$ 564</b> | <b>\$ 997</b> | <b>\$ 1,148</b> | <b>\$ 1,281</b> | <b>\$ 1,358</b> | <b>\$ 1,441</b> | <b>\$ 1,528</b> |
| XNCR US Share   |       |       |       |       |       |       |       |       |       |       | 20%          | 20%           | 20%           | 20%           | 20%             | 20%             | 20%             | 20%             | 20%             |
| <b>XNCR US Royalties</b>                                  |       |       |       |       |       |       |       |       |       |       | <b>\$ 20</b> | <b>\$ 61</b>  | <b>\$ 113</b> | <b>\$ 199</b> | <b>\$ 230</b>   | <b>\$ 256</b>   | <b>\$ 272</b>   | <b>\$ 288</b>   | <b>\$ 306</b>   |

Source: MLV &amp; Co. estimates.

| EU Asthma   | 2012  | 2013  | 2014E | 2015E | 2016E | 2017E | 2018E | 2019E | 2020E | 2021E | 2022E | 2023E        | 2024E         | 2025E         | 2026E         | 2027E         | 2028E         | 2029E         | 2030E         |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Adult Asthmatics in EU (MM)                               | 19.1  | 19.7  | 20.3  | 20.9  | 21.5  | 22.1  | 22.8  | 23.4  | 24.1  | 24.8  | 25.6  | 26.3         | 27.1          | 27.9          | 28.7          | 29.6          | 30.5          | 31.4          | 32.3          |
| Growth rate   | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96%        | 2.96%         | 2.96%         | 2.96%         | 2.96%         | 2.96%         | 2.96%         | 2.96%         |
| % adults receiving treatment                              | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%          | 53%           | 53%           | 53%           | 53%           | 53%           | 53%           | 53%           |
| Adults receiving treatment                                | 10.1  | 10.4  | 10.7  | 11.1  | 11.4  | 11.7  | 12.1  | 12.4  | 12.8  | 13.2  | 13.6  | 14.0         | 14.4          | 14.8          | 15.2          | 15.7          | 16.2          | 16.6          | 17.1          |
| % patients with Moderate-Severe asthma                    | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%   | 36%          | 36%           | 36%           | 36%           | 36%           | 36%           | 36%           | 36%           |
| Patients with Severe Asthma (000s)                        | 3,647 | 3,755 | 3,866 | 3,980 | 4,098 | 4,219 | 4,344 | 4,473 | 4,605 | 4,741 | 4,881 | 5,026        | 5,174         | 5,327         | 5,485         | 5,647         | 5,814         | 5,986         | 6,163         |
| % Uncontrolled  | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%          | 20%           | 20%           | 20%           | 20%           | 20%           | 20%           | 20%           |
| Patients with Uncontrolled Severe Asthma (000s)           | 729   | 751   | 773   | 796   | 820   | 844   | 869   | 895   | 921   | 948   | 976   | 1,005        | 1,035         | 1,065         | 1,097         | 1,129         | 1,163         | 1,197         | 1,233         |
| % patients with elevated IgE levels                       | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%          | 67%           | 67%           | 67%           | 67%           | 67%           | 67%           | 67%           |
| IgE-eligible patients                                     | 486   | 501   | 515   | 531   | 546   | 563   | 579   | 596   | 614   | 632   | 651   | 670          | 690           | 710           | 731           | 753           | 775           | 798           | 822           |
| % Xolair Ineligible due to Weight or IgE Level            | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%          | 25%           | 25%           | 25%           | 25%           | 25%           | 25%           | 25%           |
| Patients Ineligible for Xolair due to Weight or IgE Level | 122   | 125   | 129   | 133   | 137   | 141   | 145   | 149   | 153   | 158   | 163   | 168          | 172           | 178           | 183           | 188           | 194           | 200           | 205           |
| XmAb 7195 Penetration in Xolair Ineligible                |       |       |       |       |       |       |       |       |       |       |       | 2.5%         | 10.0%         | 15.0%         | 20.0%         | 20.0%         | 20.0%         | 20.0%         | 20.0%         |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       |       | 4.19         | 17            | 27            | 37            | 38            | 39            | 40            | 41            |
| Annual Price (\$000s)                                     |       |       |       |       |       |       |       |       |       |       |       | \$ 9,270     | \$ 9,270      | \$ 9,270      | \$ 9,270      | \$ 9,270      | \$ 9,270      | \$ 9,270      | \$ 9,270      |
| <b>XmAb 7195 Adult Xolair Ineligible Revenue (\$MM)</b>   |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 39</b> | <b>\$ 160</b> | <b>\$ 247</b> | <b>\$ 339</b> | <b>\$ 349</b> | <b>\$ 359</b> | <b>\$ 370</b> | <b>\$ 381</b> |
| XmAb 7195 Penetration in Xolair Eligible                  |       |       |       |       |       |       |       |       |       |       |       | 0.5%         | 1.0%          | 1.5%          | 2.0%          | 2.5%          | 2.5%          | 2.5%          | 2.5%          |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       |       | 3            | 7             | 11            | 15            | 19            | 19            | 20            | 21            |
| <b>XmAb 7195 Adult Xolair Eligible Revenue (\$MM)</b>     |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 31</b> | <b>\$ 64</b>  | <b>\$ 99</b>  | <b>\$ 136</b> | <b>\$ 174</b> | <b>\$ 180</b> | <b>\$ 185</b> | <b>\$ 190</b> |
| <b>Xolair EU Revenue in Adult Allergic Asthma</b>         |       |       |       |       |       |       |       |       |       |       |       | \$ 70        | \$ 224        | \$ 346        | \$ 475        | \$ 523        | \$ 539        | \$ 555        | \$ 571        |
| XNCR EU Share   |       |       |       |       |       |       |       |       |       |       |       | 20%          | 20%           | 20%           | 20%           | 20%           | 20%           | 20%           | 20%           |
| <b>XNCR EU Royalties</b>                                  |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 14</b> | <b>\$ 45</b>  | <b>\$ 69</b>  | <b>\$ 95</b>  | <b>\$ 105</b> | <b>\$ 108</b> | <b>\$ 111</b> | <b>\$ 114</b> |

Source: MLV &amp; Co. estimates.

| Japan Asthma  | 2012  | 2013  | 2014E | 2015E | 2016E | 2017E | 2018E | 2019E | 2020E | 2021E | 2022E | 2023E | 2024E        | 2025E        | 2026E        | 2027E         | 2028E         | 2029E         | 2030E         |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|
| Adult Asthmatics in Japan (MM)                            | 3.0   | 3.1   | 3.2   | 3.3   | 3.4   | 3.5   | 3.6   | 3.7   | 3.8   | 3.9   | 4.0   | 4.1   | 4.3          | 4.4          | 4.5          | 4.6           | 4.8           | 4.9           | 5.1           |
| Growth rate   | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96% | 2.96%        | 2.96%        | 2.96%        | 2.96%         | 2.96%         | 2.96%         | 2.96%         |
| % adults receiving treatment                              | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%   | 53%          | 53%          | 53%          | 53%           | 53%           | 53%           | 53%           |
| Adults receiving treatment                                | 1.6   | 1.6   | 1.7   | 1.7   | 1.8   | 1.8   | 1.9   | 1.9   | 2.0   | 2.1   | 2.1   | 2.2   | 2.3          | 2.3          | 2.4          | 2.5           | 2.5           | 2.6           | 2.7           |
| % patients with Moderate-Severe asthma                    | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%   | 37%          | 37%          | 37%          | 37%           | 37%           | 37%           | 37%           |
| Patients with Severe Asthma (000s)                        | 588   | 606   | 624   | 642   | 661   | 681   | 701   | 721   | 743   | 765   | 787   | 811   | 835          | 859          | 885          | 911           | 938           | 966           | 994           |
| % Uncontrolled  | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%   | 20%          | 20%          | 20%          | 20%           | 20%           | 20%           | 20%           |
| Patients with Uncontrolled Severe Asthma (000s)           | 118   | 121   | 125   | 128   | 132   | 136   | 140   | 144   | 149   | 153   | 157   | 162   | 167          | 172          | 177          | 182           | 188           | 193           | 199           |
| % patients with elevated IgE levels                       | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%   | 67%          | 67%          | 67%          | 67%           | 67%           | 67%           | 67%           |
| IgE-eligible patients                                     | 78    | 81    | 83    | 86    | 88    | 91    | 93    | 96    | 99    | 102   | 105   | 108   | 111          | 115          | 118          | 121           | 125           | 129           | 133           |
| % Xolair Ineligible due to Weight or IgE Level            | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%   | 25%          | 25%          | 25%          | 25%           | 25%           | 25%           | 25%           |
| Patients Ineligible for Xolair due to Weight or IgE Level | 20    | 20    | 21    | 21    | 22    | 23    | 23    | 24    | 25    | 25    | 26    | 27    | 28           | 29           | 29           | 30            | 31            | 32            | 33            |
| XmAb 7195 Penetration in Xolair Ineligible                |       |       |       |       |       |       |       |       |       |       |       |       | 2.5%         | 5.0%         | 10.0%        | 15.0%         | 20.0%         | 20.0%         | 20.0%         |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       |       |       | 1            | 1            | 3            | 5             | 6             | 6             | 7             |
| Annual Price (\$000s)                                     |       |       |       |       |       |       |       |       |       |       |       |       | \$ 15.914    | \$ 16.391    | \$ 16.883    | \$ 17.389     | \$ 17.911     | \$ 18.448     | \$ 19.002     |
| <b>XmAb 7195 Adult Xolair Ineligible Revenue (\$MM)</b>   |       |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 11</b> | <b>\$ 23</b> | <b>\$ 50</b> | <b>\$ 79</b>  | <b>\$ 112</b> | <b>\$ 119</b> | <b>\$ 126</b> |
| XmAb 7195 Penetration in Xolair Eligible                  |       |       |       |       |       |       |       |       |       |       |       |       | 0.5%         | 1.0%         | 1.5%         | 2.0%          | 2.5%          | 2.5%          | 2.5%          |
| XmAb 7195 Treated (000s)                                  |       |       |       |       |       |       |       |       |       |       |       |       | 1            | 1            | 2            | 2             | 3             | 3             | 3             |
| <b>XmAb 7195 Adult Xolair Eligible Revenue (\$MM)</b>     |       |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 9</b>  | <b>\$ 19</b> | <b>\$ 30</b> | <b>\$ 42</b>  | <b>\$ 56</b>  | <b>\$ 59</b>  | <b>\$ 63</b>  |
| <b>Xolair Japan Revenue in Adult Allergic Asthma</b>      |       |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 20</b> | <b>\$ 42</b> | <b>\$ 80</b> | <b>\$ 121</b> | <b>\$ 168</b> | <b>\$ 178</b> | <b>\$ 189</b> |
| XNCR Japan Share  |       |       |       |       |       |       |       |       |       |       |       |       | 20%          | 20%          | 20%          | 20%           | 20%           | 20%           | 20%           |
| <b>XNCR Japan Royalties</b>                               |       |       |       |       |       |       |       |       |       |       |       |       | <b>\$ 4</b>  | <b>\$ 8</b>  | <b>\$ 16</b> | <b>\$ 24</b>  | <b>\$ 34</b>  | <b>\$ 36</b>  | <b>\$ 38</b>  |

Source: MLV &amp; Co. estimates.

| <b>Xencor, Inc. (XNCR)</b>               | <b>2014E</b>     |                  |                  |                  |                  | <b>2015E</b>     |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Income Statement (\$MM, YE 12/31)</b> | <b>1QA</b>       | <b>2QA</b>       | <b>3QE</b>       | <b>4QE</b>       | <b>Year</b>      | <b>1QE</b>       | <b>2QE</b>       | <b>3QE</b>       | <b>4QE</b>       | <b>Year</b>      | <b>2016E</b>     |
| XmAb7195 royalty revenue                 | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| XmAb7195 milestone revenue               | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Other revenue                            | <u>2.2</u>       | <u>0.8</u>       | <u>0.5</u>       | <u>2.0</u>       | <u>5.5</u>       | <u>0.5</u>       | <u>0.5</u>       | <u>5.0</u>       | <u>0.5</u>       | <u>6.5</u>       | <u>5.0</u>       |
| Total revenue                            | 2.2              | 0.8              | 0.5              | 2.0              | 5.5              | 0.5              | 0.5              | 5.0              | 0.5              | 6.5              | 5.0              |
| Cost of goods sold                       | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Gross profit                             | 2.2              | 0.8              | 0.5              | 2.0              | 5.5              | 0.5              | 0.5              | 5.0              | 0.5              | 6.5              | 5.0              |
| R&D                                      | 4.2              | 4.3              | 4.5              | 3.9              | 16.9             | 4.2              | 4.2              | 4.2              | 4.2              | 16.8             | 17.5             |
| G&A                                      | <u>1.7</u>       | <u>1.6</u>       | <u>1.7</u>       | <u>1.7</u>       | <u>6.7</u>       | <u>1.8</u>       | <u>1.6</u>       | <u>1.8</u>       | <u>1.8</u>       | <u>6.9</u>       | <u>7.1</u>       |
| Total operating expense                  | 6.0              | 5.9              | 6.2              | 5.6              | 23.6             | 6.0              | 5.8              | 6.0              | 6.0              | 23.7             | 24.6             |
| Operating profit (loss)                  | (3.8)            | (5.1)            | (5.7)            | (3.6)            | (18.1)           | (5.5)            | (5.3)            | (1.0)            | (5.5)            | (17.2)           | (19.6)           |
| Interest income                          | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Interest expense                         | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Other income (expense)                   | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Pre-tax profit                           | (3.8)            | (5.0)            | (5.7)            | (3.6)            | (18.1)           | (5.5)            | (5.3)            | (1.0)            | (5.5)            | (17.2)           | (19.6)           |
| Tax                                      | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| Net income (loss)                        | (3.8)            | (5.0)            | (5.7)            | (3.6)            | (18.1)           | (5.5)            | (5.3)            | (1.0)            | (5.5)            | (17.2)           | (19.6)           |
| <b>EPS</b>                               | <b>\$ (0.12)</b> | <b>\$ (0.16)</b> | <b>\$ (0.18)</b> | <b>\$ (0.11)</b> | <b>\$ (0.58)</b> | <b>\$ (0.17)</b> | <b>\$ (0.17)</b> | <b>\$ (0.03)</b> | <b>\$ (0.17)</b> | <b>\$ (0.55)</b> | <b>\$ (0.63)</b> |
| Weighted average diluted shares (MM)     | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             | 31.4             |
| Tax rate                                 | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             | 0.0%             |

Source: Company reports and MLV & Co. estimates.



| Xencor, Inc. (XNCR)         | 2014E        |              |              |              |               | 2015E        |              |              |              |               |               |
|-----------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|---------------|
| Cash Flow (\$MM, YE 12/31)  | 1QA          | 2QA          | 3QE          | 4QE          | Year          | 1QE          | 2QE          | 3QE          | 4QE          | Year          | 2016E         |
| Operating profit            | (3.8)        | (5.1)        | (5.7)        | (3.6)        | (18.1)        | (5.5)        | (5.3)        | (1.0)        | (5.5)        | (17.2)        | (19.6)        |
| D&A                         | 0.3          | 0.2          | 0.2          | 0.2          | 0.9           | 0.2          | 0.2          | 0.2          | 0.2          | 0.8           | 0.8           |
| Stock based compensation    | <u>0.3</u>   | <u>0.4</u>   | <u>0.4</u>   | <u>0.4</u>   | <u>1.4</u>    | <u>0.5</u>   | <u>0.5</u>   | <u>0.5</u>   | <u>0.5</u>   | <u>2.0</u>    | <u>2.0</u>    |
| EBITDA                      | (3.2)        | (4.5)        | (5.1)        | (3.0)        | (15.8)        | (4.8)        | (4.6)        | (0.3)        | (4.8)        | (14.4)        | (16.8)        |
| Cash interest expense       | (0.0)        | (0.0)        | 0.0          | 0.0          | (0.0)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Cash tax expense            | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Accounts receivable         | (0.5)        | 0.5          | 0.0          | 0.0          | (0.0)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Deferred revenue            | (0.9)        | (0.7)        | 0.0          | 0.0          | (1.6)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Inventory                   | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Accounts payable            | (0.5)        | (0.7)        | 0.0          | 0.0          | (1.2)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.2           | 0.0           |
| Accrued expense & other     |              |              | <u>0.4</u>   | <u>0.4</u>   | <u>0.8</u>    | <u>0.5</u>   | <u>0.5</u>   | <u>0.5</u>   | <u>0.5</u>   | <u>2.0</u>    | <u>2.0</u>    |
| Working capital             | (1.9)        | (1.0)        | 0.0          | 0.0          | (2.0)         | 0.0          | 0.0          | 0.0          | 0.0          | 2.2           | 0.0           |
| Other                       | 0.1          | (0.3)        | 0.0          | 0.0          | (0.2)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| <b>Cash from operations</b> | <b>(5.0)</b> | <b>(5.8)</b> | <b>(5.1)</b> | <b>(3.0)</b> | <b>(18.8)</b> | <b>(4.7)</b> | <b>(4.6)</b> | <b>(0.2)</b> | <b>(4.7)</b> | <b>(14.2)</b> | <b>(16.8)</b> |
| Acquisition of IP           | (0.4)        | (0.4)        | 0.0          | 0.0          | (0.8)         | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| Capital expenditures        | (0.1)        | (0.3)        | (0.3)        | (0.3)        | (0.9)         | (0.4)        | (0.4)        | (0.4)        | (0.4)        | (1.6)         | (1.7)         |
| Divestitures                | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0           | 0.0           |
| <b>Free cash flow</b>       | <b>(5.4)</b> | <b>(6.4)</b> | <b>(5.4)</b> | <b>(3.3)</b> | <b>(20.5)</b> | <b>(5.1)</b> | <b>(5.0)</b> | <b>(0.6)</b> | <b>(5.1)</b> | <b>(15.8)</b> | <b>(18.5)</b> |
| Cash from operations        | (5.0)        | (5.8)        | (5.1)        | (3.0)        | (18.8)        | (4.7)        | (4.6)        | (0.2)        | (4.7)        | (14.2)        | (16.8)        |
| Cash from investing         | (0.4)        | (0.7)        | (0.3)        | (0.3)        | (1.7)         | (0.4)        | (0.4)        | (0.4)        | (0.4)        | (1.6)         | (1.7)         |
| Cash from financing         | <u>0.0</u>   | <u>0.1</u>   | <u>0.0</u>   | <u>0.0</u>   | <u>0.1</u>    | <u>0.0</u>   | <u>0.0</u>   | <u>0.0</u>   | <u>0.0</u>   | <u>0.0</u>    | <u>0.0</u>    |
| Change in cash              | (5.4)        | (6.3)        | (5.4)        | (3.3)        | (20.4)        | (5.1)        | (5.0)        | (0.6)        | (5.1)        | (15.8)        | (18.5)        |
| Cash, beginning             | 78.0         | 72.5         | 66.2         | 60.9         | 78.0          | 57.6         | 52.5         | 47.5         | 46.9         | 57.6          | 41.8          |
| <b>Cash, ending</b>         | <b>72.5</b>  | <b>66.2</b>  | <b>60.9</b>  | <b>57.6</b>  | <b>57.6</b>   | <b>52.5</b>  | <b>47.5</b>  | <b>46.9</b>  | <b>41.8</b>  | <b>41.8</b>   | <b>23.3</b>   |

Source: Company reports and MLV & Co. estimates.

| Xencor, Inc. (XNCR)<br>Balance Sheet Projected (\$MM, YE 12/31) | 2014E       |             |             |             |             | 2015E       |             |             |             |             | 2016E       |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   | 1QA         | 2QA         | 3QE         | 4QE         | Year        | 1QE         | 2QE         | 3QE         | 4QE         | Year        |             |
| Cash  | 72.5        | 66.2        | 60.9        | 57.6        | 57.6        | 52.5        | 47.5        | 46.9        | 41.8        | 41.8        | 23.3        |
| Other current assets  | 0.7         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         | 0.5         |
| PP&E  | 0.3         | 0.6         | 0.7         | 0.8         | 0.8         | 1.0         | 1.2         | 1.4         | 1.6         | 1.6         | 2.5         |
| Patents, etc.   | 8.9         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         | 9.1         |
| Other assets  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  | <u>0.1</u>  |
| <b>Total assets</b>   | <b>82.5</b> | <b>76.4</b> | <b>71.1</b> | <b>68.0</b> | <b>68.0</b> | <b>63.0</b> | <b>58.2</b> | <b>57.8</b> | <b>52.9</b> | <b>52.9</b> | <b>35.3</b> |
| Accounts payable  | 2.1         | 1.4         | 1.4         | 1.5         | 1.5         | 1.5         | 1.5         | 1.6         | 1.6         | 1.6         | 1.7         |
| Accrued expense   | 1.5         | 1.3         | 1.4         | 1.4         | 1.4         | 1.5         | 1.4         | 1.5         | 1.5         | 1.5         | 1.6         |
| Other   | <u>8.9</u>  | <u>8.1</u>  | <u>8.4</u>  | <u>8.8</u>  | <u>8.8</u>  | <u>9.3</u>  | <u>9.9</u>  | <u>10.3</u> | <u>10.8</u> | <u>10.8</u> | <u>12.7</u> |
| <b>Total liabilities</b>  | <b>12.4</b> | <b>10.9</b> | <b>11.3</b> | <b>11.7</b> | <b>11.7</b> | <b>12.3</b> | <b>12.8</b> | <b>13.4</b> | <b>13.9</b> | <b>13.9</b> | <b>16.0</b> |
| <b>Shareholders' equity</b>                                     | <b>70.1</b> | <b>65.5</b> | <b>59.8</b> | <b>56.2</b> | <b>56.2</b> | <b>50.7</b> | <b>45.4</b> | <b>44.4</b> | <b>39.0</b> | <b>39.0</b> | <b>19.4</b> |
| <b>Total liabilities &amp; S/E</b>                              | <b>82.5</b> | <b>76.4</b> | <b>71.1</b> | <b>68.0</b> | <b>68.0</b> | <b>63.0</b> | <b>58.2</b> | <b>57.8</b> | <b>52.9</b> | <b>52.9</b> | <b>35.3</b> |

Source: Company reports and MLV & Co. estimates.

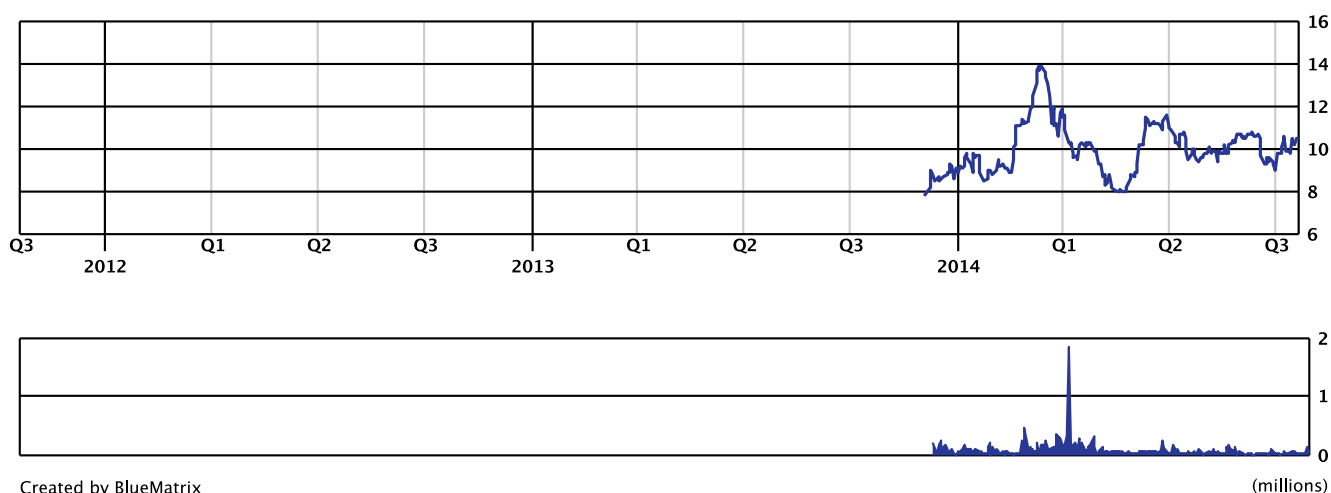
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**Xencor, Inc. (XNCR): Share Price (in USD) and Volume History as of 10-21-2014**

Created by BlueMatrix

(millions)

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| Rating | COMPANIES UNDER COVERAGE |         | INVESTMENT BANKING SERVICE WITHIN 12 MONTHS |         |
|--------|--------------------------|---------|---|---------|
|        | Count                    | Percent | Count                                       | Percent |
| BUY    | 102                      | 63.75%  | 47  | 29.38%  |
| HOLD   | 58                       | 36.25%  | 21  | 13.12%  |
| SELL   | 0                        | 0.00%   | 0   | 0.00%   |

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