January 6, 2014

HEALTHCARE/BIOTECHNOLOGY

Stock Rating:

OUTPERFORM

12-18 mo. Price Target	$19.00
TLOG - NASDAQ	$10.48
3-5 Yr. EPS Gr. Rate	NA
52-Wk Range	$10.97-$6.91
Shares Outstanding	22.2M
Float	5.2M
Market Capitalization	$232.5M
Avg. Daily Trading Volume	NA
Dividend/Div Yield	NA/NM
Book Value	$2.52
Fiscal Year Ends	Dec
2014E ROE	NA
LT Debt	$0.0M
Preferred	$0.0M
Common Equity	NA
Convertible Available	Yes

Trading volume is as of 12/12/13

EPS Diluted	Q1	Q2	Q3	Q4	Year	Mult.
2012A	--	--	--	--	(1.52)	NM
2013E	--	--	--	--	(0.83)	NM
2014E	(0.25)	(0.25)	(0.24)	(0.22)	(0.95)	NM
2015E	--	--	--	--	(1.15)	NM

TetraLogic Pharmaceuticals Corporation

Best In Class Drug With High Insider Ownership; Initiate with Outperform

SUMMARY

We are initiating coverage of TetraLogic with an Outperform rating and a 12-18 month price target of $19/share. TetraLogic is developing birinapant, which in our view is best in class SMAC mimetic compound that is targeting a medicinally high interest mechanism and has a large commercial potential. Birinapant may be combined with a range of apoptosis-triggering drugs, and enhance their activity by side-stepping certain tumor mutations that have limited the activity of these drugs in the past. As such, we see many potential interested parties in this drug pending positive data.

KEY POINTS

- Many approved and development-stage drugs target apoptosis. However, mutations in the apoptosis pathway limits the efficacy of these drugs. The addition of birinapant can significantly increase efficacy by countering the cell's apoptosis pathway mutations.
- Although the drug has been tested only in single-arm studies to date, we believe that the initial data in colorectal cancer and AML/MDS is encouraging and suggestive of synergy with apoptosis-triggering drugs.
- A combination study of birinapant + Amgen's TRAIL antibody is ongoing with data anticipated in 2Q14. We believe that, if the data are positive, birinapant may become a very valuable drug for Amgen given the company's high level of interest and investment in TRAIL.
- We would like to highlight that employee ownership of TLOG shares is ~20%. Additionally, Amgen, Pfizer, and several respected VC funds held shares of TLOG pre-IPO and participated in the public offering. This is a uniquely positive and encouraging factor for an emerging growth biotech.
- Our valuation and price target of $19/share is based on analysis of comparable companies. We believe that it is too early to build an NPV model given the wide range of malignancies where birinapant may be used.

Stock Price Performance

Company Description

TetraLogic is a clinical-stage biopharmaceutical company focused on the discovery and development of SMAC-mimetics. The lead candidate, Birinapant is an anti-cancer SMAC-mimetic designed to enable TNF-activated apoptosis.

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Table Of Contents

Investment Thesis

We are initiating coverage of TetraLogic Pharmaceuticals Corporation (TLOG) with an Outperform rating and 12- to 18-month price target of $19/share. TetraLogic Pharmaceuticals is a clinical-stage biopharmaceutical company focused on the development of small molecules called SMAC mimetics for the treatment of cancer. SMAC (secondary mitochondria-derived activator of caspase) is an endogenous protein that promotes apoptosis by inhibiting IAPs (inhibitors of apoptosis). The company's leading asset, birinapant, is a bivalent SMAC-mimetic that was selected from a proprietary library of more than 3,000 SMAC-mimetic compounds. The candidate has shown tumor regression as a single-agent, treated over 275 subjects in the clinic, and is in Phase II clinical development.

Birinapant is being evaluated in ongoing clinical studies for the treatment of hematologic malignancies as well as solid tumors and infectious disease. In hematologic malignancies, TetraLogic aims to advance birinapant into a randomized Phase II study for the treatment of higher-risk myelodysplastic syndrome (MDS) in 1H14. The study will evaluate birinapant in combination with azacitidine versus azacitidine alone. The objective of the Phase II study is to establish the safety, efficacy, and dosing regiment of birinapant to serve as the basis of a future Phase III study in higher-risk MDS.

TetraLogic is also evaluating birinapant for the treatment of ovarian cancer in an ongoing Phase I/II clinical study in combination with Amgen's TRAIL receptor agonist antibody, conatumumab. The company commenced the study in November 2013 and data readout from the Phase I/II study is expected in 2Q14. We view this data as a key 2014 catalyst for TLOG shares.

We also highlight that in preclinical studies, birinapant has demonstrated its ability to significantly reduce Hepatitis B virus (HBV). As a result, TetraLogic has announced plans to commence a Phase I clinical study of birinapant for the treatment of Hepatitis B in 4Q14.

For valuation we believe that it is too early to build an NPV model due to the broad potential of indications in which birinapant may be utilized. Our $19 price target for TLOG is based on analysis of the market capitalization of comparable companies. For our comparable universe we selected emerging growth biotechnology companies that have achieved a proof of concept and are primarily in Phase II development. We acknowledge the difficulty in finding perfect comparables and believe that our list is a reasonable and conservative snapshot of where TetraLogic may be in 12-18 months. Our comparable companies have an average market cap of $579M. Our estimated fully diluted share count for TLOG at the end of 2014 is 31M shares, resulting in our $19/share price target.

Product Pipeline

Exhibit 1: Products / Product Pipeline

Drug	Indication	Pre-clinical	Phase I	Phase II	Phase III	Status
Birinapant in Blood Cancers						
	AML/MDS/ALL					Investigator-initiated Phase I/II clinical trail in progress.
	Myelodysplastic Syndrome (MDS)					Dosing started in Phase I clinical trail in August 2013. Target start of a randomized Phase II trail is 1H14.
Birinapant in Solid Cancers						
	Colorectal Cancer (CRC)					Phase I/II substantially complete, 1 subject remains on study.
	Ovarian Cancer					Investigator-initiated Phase II clinical trial in progress.
	Ovarian Cancer (Amgen Collaboration)					Phase I/II clinical trial in progress.
Birinapant in Viral Infections						
	Hepatitis B					Target start of Phase I clinical trial is 4Q14.

Source: TetraLogic Pharmaceuticals; Oppenheimer & Co. Inc.

Key Milestones

Exhibit 2: Key Upcoming Milestones

Date	Stage	Milestone
Birinapant in Blood Cancers		
1Q14	Phase I	Data readout from birinapant+azacitidine MDS study
2Q14	Phase II	Commence randomized birinapant+azacitidine 1st-line higher risk MDS study
2Q15	Phase II	Data readout from randomized birinapant+azacitidine MDS study
Birinapant in Solid Tumors		
2Q14	Phase I/II	Data readout from birinapant+conatumumab ovarian cancer study
2014	Phase II	Start birinapant+irinotecan randomized colorectal study (pending funding)
Birinapant in Viral Infections		
4Q14	Phase I	Commence hepatitis B study
2Q15	Phase I	Data readout from hepatitis B study

Source: TetraLogic Pharmaceuticals; Oppenheimer & Co. Inc.

Valuation

Initiating With Outperform Rating and a $19/Share Price Target

Our valuation for TetraLogic Pharmaceuticals is based on analysis of the market capitalization of comparable companies. In our view, a large part of the valuation of TetraLogic is attributed to birinapant. However, at this stage of development we find it difficult to build an NPV model given the uncertainty in the product profile and the associated commercial potential. Additionally, the company's library of SMAC-mimetic molecules may also prove to be valuable, but little is known about other candidates the company might advance into clinical development. For our comparable universe we selected emerging growth biotechnology companies that have achieved a proof of concept and are primarily in Phase II development. We acknowledge the difficulty in finding perfect comparables and believe that our list is a reasonable estimate of where TetraLogic may be in 12-18 months. Our comparable companies have an average market cap of $579M. Our estimated fully diluted share count for TLOG at the end of 2014 is 31M shares, resulting in our $19/share price target.

Exhibit 3: Price Target Based On Comparables Analysis

Company Name	Ticker	Rating	Price (1/3/14)	Market Cap ($M)
Ambit Biosciences Corp.	AMBI	NC	$9.89	$177
Clovis Oncology, Inc.	CLVS	NC	$59.82	$2,028
Galena Biopharma, Inc.	GALE	O	$5.08	$520
Idenix Pharmaceuticals	IDIX	P	$6.14	$823
Immunomedics, Inc.	IMMU	O	$4.91	$408
Infinity Pharmaceuticals, Inc.	INFI	NC	$13.44	$645
Karyopharm Therapeutics	KPTI	O	$23.01	$685
Peregrine Pharmaceuticals, Inc.	PPHM	NC	$1.39	$223
Stemline Therapeutics Inc.	STML	NC	$20.35	$263
Threshold Pharmaceuticals, Inc.	THLD	NC	$4.79	$278
Verastem, Inc.	VSTM	O	$12.48	$320
Mean				**$579**
Median				**$408**

TetraLogic Pharmaceuticals	**TLOG**
Fully diluted shares outstanding (M):	30.91
Price Target:	**$18.73**

Note: NC = Not Covered; O = Outperform; P = Perform; U = Underperform
Source: Oppenheimer & Co. Inc.

Risks To Our Thesis And Price Target

There are multiple risks and uncertainties associated with an investment in development and early stage commercial biotechnology companies. We recommend investors review all regulatory filings for TetraLogic Pharmaceuticals as well as the detailed summary of investment risks. Below we highlight the top risks that relate to our thesis and price target.

Clinical Development Risk

TetraLogic Pharmaceuticals must gain FDA approval in the US and European Commission (EC) approval in Europe before it can market its products. The company is working with regulatory agencies to ensure that its clinical development strategies will satisfy regulatory requirements. There is a risk that the ongoing and future clinical studies may not produce the desired clinical outcomes.

Financing Risk

TetraLogic Pharmaceuticals may require additional capital as it continues to advance its clinical pipeline. We presently assume a financing in 3Q14, and our current price target includes this additional dilution.

Competitive Risk

TetraLogic Pharmaceuticals is focused on the development of birinapant in several indications, including myelodysplastic syndrome (MDS), acute myeloid leukemia (AML), acute lymphoblastic leukemia (ALL), colorectal cancer (CRC) and ovarian cancer. For each indication there are a number of approved treatments and treatments in development. There is a risk that if approved birinapant may not successfully compete in one or more indication.

Liquidity and Small Capitalization

TetraLogic Pharmaceuticals is a newly public small capitalization (less than $500M) unprofitable biotechnology company. The company may require additional capital to reach profitability, and an inability to raise capital on favorable terms or at all may significantly impact the company's valuation. The company's stock may also exhibit volatility due to events not directly related to its operations, including macroeconomic concerns, healthcare policy, and political developments. Additionally, the lack of liquidity in shares of TLOG may limit some investors' ability to acquire and sell shares in a timely fashion.

Birinapant Scientific Background

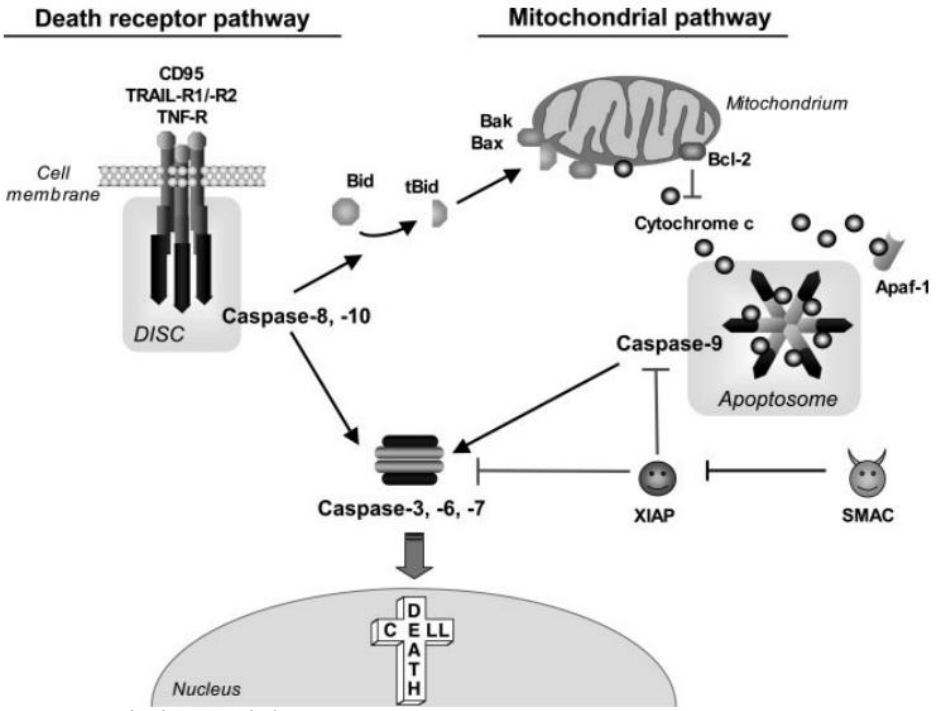
Cells undergo a complex lifecycle from cell division to maturation, specialization, and frequently ending in cell death. Each stage of this cycle is highly regulated, and errors in this regulatory mechanism can result in various pathologies. In this report we will focus specifically on apoptosis, also known as programmed cell death.

Apoptosis is a regularly ongoing process in every human. Certain cells begin to die (undergo apoptosis) in a developing fetus to form bodily features, and it is estimated that approximately 10^{10} cells[1] undergo apoptosis per day in an adult out of a total of ~ $4x10^{13}$ cells in the human body[2]. The key distinction between apoptosis (programmed cell death) vs. necrosis (non-programmed death) is that apoptosis results in final cell destruction by macrophages that engulf the cell. As such, intracellular materials are not released into the interstitial space, and local inflammation does not occur. Necrosis is generally a result of nutrient starvation, direct physical or chemical damage, and frequently results in rupture of the dead cell. The ruptured materials activate the inflammatory cascade.

There are two reasonably well understood mechanisms of apoptosis, intrinsic and extrinsic. Apoptosis can be triggered extrinsically by a ligand binding to a surface receptor protein (often called a death receptor), or via an intrinsic trigger that involves the mitochondria[3] (Exhibit 4).

[1] Elmore S. Apoptosis: A Review of Programmed Cell Death. Toxicology and Pathology (2007); 35(4): 495-516.
[2] Bianconi E. at al., An Estimation of the Number of Cells in the Human Body (2013); 40 (6): 463-471.
[3] Fischer U. et al., New Approaches and Therapeutic Targeting Apoptosis in Disease. Pharmacological Reviews (2005); 57:187-215.

Exhibit 4: Apoptosis Pathways



Source: TetraLogic Pharmaceuticals

Irrespective of the activation pathway (intrinsic or extrinsic), the common steps of apoptosis include the activation of the caspase family of enzymes. These enzymes are key to all known apoptosis pathways and they are generally synthesized and present in the cell in their inactive form. They are converted to their active form when the apoptosis pathway is triggered. Therefore, a lot of therapeutic approaches to activate apoptosis pathway in tumor cells involves either directly targeting caspases or other enzymes that regulate caspases. One such class of molecules is the IAP enzymes (inhibitor of apoptosis). As the name suggests, these are molecules that regulate apoptosis, and they do so by inhibiting caspases.

The intrinsic apoptosis pathway can be activated by a range of triggers, including signals of cellular stress and damage that can be initiated by chemotherapy agents and/or radiation. This pathway is mediated by the mitochondria which releases cytochrome c, Apaf-1, SMAC (second mitochondria-derived activator of caspases, a.k.a. DIABLO), and Omi/HtrA2 into the cytoplasm. Cytochrome c and Apaf-1 bind together to form a structure referred to as the apoptosome. This apoptosome triggers the catalytic activation of previously inactive caspase enzyme (caspase-9), which then activates other caspase enzymes resulting in an irreversible path to cell death. In parallel, SMAC and Omi/HTrA2 bind IAP proteins, thereby preventing IAP's from inhibiting caspases, enabling the apoptotic cascade to proceed.

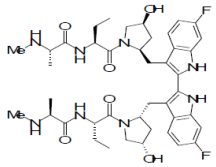
Unlike the intrinsic apoptosis pathway, the extrinsic pathway may or may not involve the mitochondria. The apoptotic cascade of events is triggered by activation of a death receptor on the cell surface. These receptors are a subgroup of the Tumor Necrosis Factor (TNF) family of enzymes, and well known activator ligands include TNF-alpha, CD95L, and TRAIL (TNF-related apoptosis inducing ligand). Once the receptors are activated, they convert inactive caspaces 8 and 10 to their active form, which then triggers the apoptosis

cascade. In some cases the pathway does not involve the mitochondria and caspase activation is all that is needed. In other instances the mitochondrial pathway is engaged following the activation of caspace-8. This leads to the release of SMAC and Omi/HtrA2 by the mitochondria into the cytoplasm, which inhibits IAP proteins and assists in the progression of the apoptotic pathway.

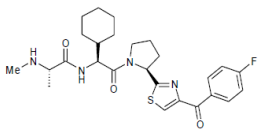
The extrinsic apoptosis pathway was investigated as a therapeutic target in animal models in the 1990s. The initial work with CD95 antibody confirmed the extrinsic apoptosis mechanism, but at the same time also caused severe hepatocyte toxicity leading to rapid animal death. Similar toxicity was observed for TNF. Therefore, both of these targets did not appear to be suitable for therapeutic intervention. However, TRAIL showed very different results. It had tumor killing activity in various mouse models, but did not appear to exhibit significant toxicity[4].

In parallel to testing drugs activating the extrinsic apoptosis mechanism, a lot of research was focused on inhibiting IAP proteins. One of the approaches is to mimic the natural IAP inhibitors like SMAC. Several companies have SMAC mimetics in development, with the most advanced being TetraLogic's birinapant, Novartis's LCL-161, and Debiopharm's Debio 1143 (Exhibit 5).

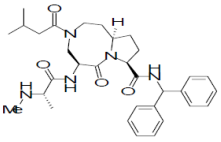
Exhibit 5: Structure of SMAC Mimetics in Development



birinapant
(TetraLogic)



LCL-161
(Novartis)



Debio 1143
(Debiopharm SA)
Formerly AT-406

Structure not disclosed

CUDC-427
(Curis)
Formerly GDC-0917

Bivalent	Monovalent	Monovalent	Monovalent

Source: TetraLogic Pharmaceuticals

One of the fundamental differences between the SMAC mimetic molecules in development is whether they are monovalent or bivalent. What that simply means is that a bivalent compound is composed of two identical components, while a monovalent compound has no such repeating structure. The reason this is of particular importance in regards to SMAC is that biologically it has been shown that SMAC forms a dimer in nature (two identical components come together) and this dimerization is essential for its activity[5]. The mechanistic stipulations suggest that the SMAC binds two domains on its receptors at the same time (BIR2 and BIR3), which is likely the reason for dimerization. Therefore, bivalent SMAC mimetics appear to be more potent than their monovalent counterparts in binding IAP and activating caspases. However, the practical tradeoff to date has been that while bivalent SMAC mimetics are more potent, they are not orally bioavailable, which is the reason why birinapant is administered via IV. However, we believe that in oncology efficacy is more important that the convenience of oral administration. Exhibit 6 summarizes the state of SMAC mimetic pipeline development from a recent publication.

[4] Roth W. et al., Locoregional Apo2L/TRAIL Eradicates Intracranial Human Malignant Glioma Xenografts In Athymic Mice In The Absence Of Neurotoxicity. Biochem and Biophys Research Commun (1999) 265:479-483.
[5] Dubrez et al. IAP Protein As Targets for Drug Development in Oncology. OncoTargets and Therapy (2013) 6:1285-1304.

Exhibit 6: Structure of SMAC Mimetics in Development

Compound	Structure	Preclinical assays in animals	Clinical trial	Conditions
AT-406 (SM-406 – Debio 1143) Ascenta therapeutics/ debiopharm SA	Monovalent	• Inhibited tumor growth and sensitized cells to carboplatin in ovarian cancer xenograft model[119]	Phase I	Advanced solid tumors and lymphoma
		• Inhibited tumor growth in breast tumor xenograft model with no sign of toxicity[120]	Phase I	Combination with daunorubicin and cytarabine in patients with poor-risk acute myelogenous leukemia
		• Increased chemo- and radiotherapy sensibility in head and neck squamous cell carcinoma tumor xenograft model[221]		
Birinapant (TL-32711) TetraLogic pharmaceuticals	Bivalent	• Tumor growth arrest or inhibition in patient-derived primary pancreatic cancer explant model[199]	Phase I	Refractory solid tumors or lymphoma ➔ Well tolerated with no dose limiting toxicities, potent and sustained target inhibition, apoptotic pathway activation in tumor and antitumoral activity in colon cancer and melanoma[203]
		• Remission in acute lymphoblastic leukemia xenograft models[200]		
		• Delayed the tumor growth and increases survival in combination with ionizing radiation in a glioblastoma multiform model in mice[201]	Phase I/2	Combination chemotherapy (doxorubicin, paclitaxel, carboplatin, gemcitabine, irinotecan, docetaxel) in advanced and metastatic solid tumors
		• Inhibited tumor growth in combination with the immunomodulatory agents IFNα or GM-CSF in a kidney carcinoma xenograft model[202]	Phase I/2	Acute myelogenous leukemia, myelodysplastic syndrome and acute lymphoblastic leukemia
			Phase I	Combination with gemcitabine in patients with advanced solid tumor
			Phase 2	Advanced ovarian, fallopian tube and peritoneal cancers
			Phase I/2	Combination with 5-azacytidine in myelodysplastic syndrome
GDC-0917 Genentech	Monovalent		Phase I	Refractory solid tumors or lymphoma
GDC-0152 Genentech	Monovalent	• Inhibits tumor growth in breast cancer xenograft without affecting normal mammary epithelial cells[204]	Phase I	Locally advanced or metastatic solid malignancies, or non-Hodgkin's lymphoma without leukemic phase ➔ Well tolerated, no signs of a systemic inflammatory response
		• Induces an increased systemic level of cytokines and chemokines (TNFα and MCP-1), a systemic inflammatory response and hepatic injury when IV administered in dogs;[205] such effects were not observed in human[133]		
HGS1029 (AEG-40826) Human Genome Sciences	Bivalent		Phase I	Advanced solid tumors and refractory lymphoid malignancies
			Phase I	Relapsed or refractory lymphoid malignancies
LCL161 Novartis pharmaceuticals	Monovalent	• Delays tumor growth in multiple solid tumor xenograft models as a single agent but is ineffective in acute lymphoblastic leukemia xenograft models[108]	Phase I	Solid tumors ➔ Well tolerated[135]
		• Antitumor activity in combination with chemotherapy against a range of solid tumors including primary models of breast cancer (Novartis website)*	Phase I	Combination with weekly paclitaxel in patients with advanced solid tumor
		• Inhibits tumor growth in combination with a Bcl-2 inhibitor in hepatocellular carcinoma xenograft models[110]	Phase 2	Combination with weekly paclitaxel in patients with breast cancer
		• Inhibits tumor growth and prolongs survival in combination with adeno-associated virus bacteriophage-TNFα in melanoma xenograft models[111]		

Source: Dubrez et al. IAP Protein As Targets for Drug Development in Oncology. OncoTargets and Therapy (2013) 6:1285-1304.

It appears that the only other bivalent SMAC mimetic in clinical development is AEG-40826 (HGS1029). However, this compound has a complex history and has had several owners in the last few years. It was initially developed by Aegera and then licensed to Human Genome Sciences in December 2007, which is when it was renamed from AEG-40826 to HGS1029. A dose escalating Phase I study in patients with solid tumors was started in May 2008, and was completed in January 2012[6].Human Genome Sciences started a Phase 1, multi-center, open-label study of the compound in 11 subjects in lymphoid malignancies in October 2009, but the study was terminated[7]. In July 2012 Human Genome Sciences was acquired by GSK, and in December 2012 GSK returned this compound to Aegera. However, at that time Aegera was no longer an independent company as it was acquired by Pharmascience in May 2011. At this point there are no new studies of this compound on clinicaltrials.gov, and it is not clear why GSK returned the compound and if Pharmascience has interest in developing it further. As such, we believe that birinapant is the most advanced and only bivalent SMAC mimetic in active clinical development.

[6] www.clinicaltrials.gov identified# NCT00708006
[7] www.clinicaltrials.gov identifier # NCT01013818

Birinapant For AML/MDS/ALL

Birinapant is being evaluated in an ongoing Phase I/II investigator-sponsored trial (IST) for the treatment of blood cancers including acute myeloid leukemia (AML), myelodysplastic syndrome (MDS), and acute lymphoblastic leukemia (ALL). The open-label, non-randomized Phase I/II study[8] commended December 2011 and is being conducted at the University of Pennsylvania. A total of 37 patients are expected to enroll and results are anticipated in late 2014 or early 2015. Thus far, TetraLogic reports that 23 patients, most of whom are elderly (over age 70), have been treated with birinapant with or without hydroxyurea. The majority of patients have AML secondary to MDS and thus far 10 patients have received hydroxyurea in addition to birinapant.

The primary endpoint of the Phase I/II study is safety and the secondary endpoint is overall survival (OS). It is worth noting that early results have signaled that birinapant is showing signs of clinical activity in MDS. These results include tumor bulk reductions and increases in normal neutrophils. In our view, these early signs of disease improvement are encouraging. It is also noteworthy that one patient with AML secondary to MDS continued on treatment for 10 months.

The Phase I/II IST study is providing a first look at the emerging safety profile for birinapant in hematologic malignancies. The safety profile for birinapant in AML now includes 16 patients and the most common treatment-related adverse events (AEs) are increased serum amylase, increased serum lipase, headache, fatigue, fever and neutropenia. There were no Grade 5 events (death), but there have been eight Grade 3/4 events. Serious AEs (Grade 3/4) included neutropenia, fever, increased serum lipase and increased serum amylase.

Early signs of birinapant's clinical efficacy and tolerability shown to date in the IST Phase I/II study have led the company to commence a clinical program to evaluate birinapant in combination with azacitidine for the treatment of patients with higher-risk MDS. A Phase I dose-finding study commenced in August 2013 and the company expects to initiate a Phase II study in 1H14.

Overview of MDS

MDS encompasses a myriad of myeloid malignancies. In other words, people with MDS have malformed and dysfunctional blood cells. Many of those with MDS have complications related to low blood cell counts. MDS was formerly known as preleukemia because once blood or bone marrow blasts exceed 20% of blood cells, the disease is reclassified to be acute myeloid leukemia (AML).

The incidence rate for MDS is 4.4-4.6 cases per 100,000 people[9]. This indicates that in the US there are about 14K new diagnoses of MDS. Between 70-75% of patients are diagnosed with lower-risk MDS, but many of the lower-risk MDS patients progress to higher-risk MDS. First-line treatment for lower-risk MDS includes erythropoiesis-stimulating agents (ESAs) such as Epogen or Procrit (Amgen and JNJ) and lenalidomide (Revlimid) from Celgene. In high-risk MDS, the indication being pursued for birinapant, DNA methyltransferase inhibitors such as azacitidine (Vidaza) from Celgene and decitabine (Dacogen) from Eisai are used commonly for front-line treatment. Lenalidomide (Revlimid), also from Celgene, is also used to treat high-risk MDS. Failing these

[8] ClinicalTrials.gov Identifier: NCT01486784
[9] Ma X., et al. Myelodysplastic Syndromes: Incidence And Survival In The United States (2007) Cancer. 109(8):1536-42.

treatments, MDS patients have few options and no FDA approved drugs. TetraLogic has designed the birinapant+azacitidine Phase II study to enroll high-risk MDS patients that are relapsed or refractory to azacitidine. Given the absence of approved agents for these patients, in our view the efficacy bar is relatively low. We believe there will be significant interest in birinapant if it can show signs that it re-sensitizes high-risk MDS patients to azacitidine.

AML Clinical Overview

The progression of MDS toward AML is characterized by progressive bone marrow failure. When this happens, the blasts begin to enter the blood and subsequently spread to other organs throughout the body. According to the American Cancer Society, there were an estimated 14,590 new cases of AML and 10,370 deaths from AML in the US in 2013. About a third of MDS patients will progress to AML. Importantly, the 55-65% five year survival rate[10] for AML has been improving, but there is still a significant unmet need to improve treatment. Generally, AML is treated first with chemotherapy. If the disease goes into remission, then a stem cell transplant may be an option.

ALL Clinical Overview

The Phase I/II IST study being conducted at the University of Chicago is also evaluating birinapant for the treatment of acute lymphoblastic leukemia (ALL). We note that the company has indicated that the majority of patients in the study are being treated for either AML or MDS. For reference, children are most at risk for developing ALL, but most deaths from the disease occur in adults. According to the American Cancer Society there were an estimated 6,070 new cases of ALL and 1,430 deaths in the US during 2013. Typically ALL is treated first with chemotherapy. If the disease goes into remission patients may be treated with short courses of chemo and a stem cell transplant may be an option.

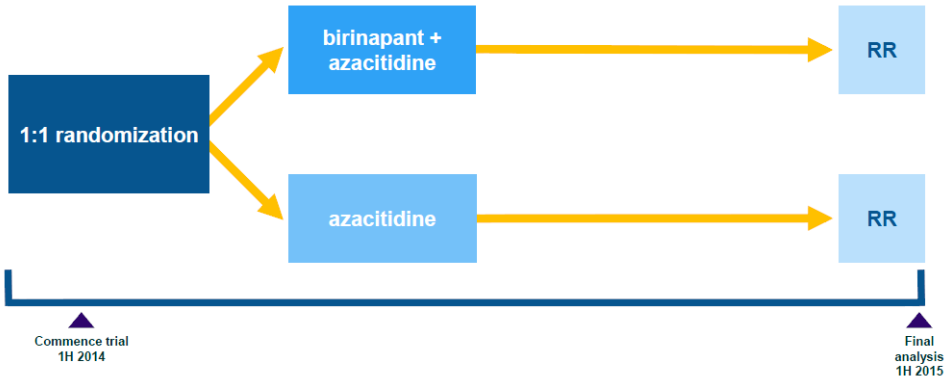
Birinapant Combination For MDS

TetraLogic is evaluating birinapant plus azacitidine for the treatment of patients with MDS in an ongoing Phase I study. The company anticipates that it will commence a randomized Phase II study in 1H14. The development of birinapant for the treatment of MDS is a key program for TetraLogic.

After preclinical studies revealed synergy between birinapant and azacitidine and early signs of clinical efficacy were seen in the ongoing investigator-sponsored Phase I/II study of AML/MDS/ALL, the company made the decision to move forward with a Phase I trial of birinapant+azacitidine in MDS. The Phase I study[11] commenced in August 2013 and is currently enrolling patients with high-risk MDS who are naïve, relapsed or refractory to azacitidine therapy. Approximately 15-20 patients are expected to enroll. This primary goal of the study is to determine the recommended birinapant dose. Once the go-forward dose is established the company plans to commence a randomized Phase II study in 1H14. Exhibit 7 below illustrates the design of the Phase II trial. The primary endpoint of the study is response rate (RR).

[10] Ries LAG, et al. SEER Cancer Statistics Review, 1975-2005. Bethesda, MD: National Cancer Institute, 2007.
[11] ClinicalTrials.gov Identifier: NCT01828346

Exhibit 7: Design Of Phase II Study Of Birinapant+Azacitidine Vs. Azacitidine In 1st Line High-Risk MDS



Source: TetraLogic Pharmaceuticals

Birinapant For Colorectal Cancer

TetraLogic is interested in continuing the development of birinapant in combination with irinotecan for the treatment of third-line colorectal cancer (CRC) patients and CRC patients with a KRAS mutation who have failed first-line therapy. We note that having a KRAS mutant gene means that they are not eligible to receive EGFR antibody therapy. The inability to receive EGFR targeted therapeutics almost ensures a worse outcome given the lack of treatment options.

On the basis of promising preclinical results the company began and has largely completed a Phase I/II clinical study of birinapant in combination with irinotecan. The combination of birinapant and irinotecan was evaluated in 71 patients that already failed prior chemotherapies, including irinotecan. The study is largely complete apart from one patient that continues on treatment without progression for more than 21 months.

The CRC study showed that birinapant sensitized irinotecan-refractory CRC patients to enable retreatment with irinotecan. As for the results, partial response (PR) was observed in six patients (8%), and the median PFS was 2.2 months. It is important to note that the company aims to commence a randomized study of birinapant in third-line CRC, but it still needs additional financing to move forward with this program.

Colon Cancer Overview

CRC is the third most common cancer in both men and women. It is estimated that there were 142,820 new cases of colorectal cancer in 2013 and 50,830 deaths[12]. From 2005-2009 incidence rates declined by 4.1% per year among adults over 50 and increased by 1.1% in adults under 50 years old. It is worth noting that 90% of CRC cases diagnosed are in those aged 50 and older.

[12] American Cancer Society. Cancer Facts And Figures 2013. Atlanta: American Cancer Society; 2013.

Common treatment options include surgery, radiation and chemotherapy. Chemotherapy is typically given to patients whose cancer has spread beyond the bowel and a number of targeted therapies are used to treat metastatic CRC. Approximately 61% of those diagnosed have disease that has spread beyond the localized stage[13]. With 5- and 10-year relative survival rates at 64% and 58%, respectively, it is clear there is still a high unmet need for the treatment of CRC.

Birinapant in Colorectal Cancer

The first clinical experience with birinapant in CRC came from a single-agent Phase I study to determine the maximum tolerated dose (MTD) in patients who had received a median of four prior therapies. In that study, two CRC patients showed prolonged disease stabilization and anti-tumor activity. The first of these two patients had a KRAS mutant tumor and stable disease for 5.1 months. The early studies showed some synergy using birinapant in combination with irinotecan. Based on the evidence of anti-tumor activity seen in the first 20 treated patients, the company expanded into a Phase II study. An additional 51 CRC patients were enrolled and the response rates were assessed using RECIST 1.1 criteria.

It is important to note that all 71 patients who received birinapant in combination with irinotecan in the Phase I/II study had already received prior irinotecan therapy. Of note, 22 patients had failed irinotecan immediately prior to starting the study. There were six PRs with five of the six patients previously treated with irinotecan. The results of the Phase I/II study are illustrated in Exhibit 8.

Exhibit 8: Phase I/II Study Of Birinapant With Irinotecan In CRC Patients

Study Population	All Subjects N=71	Subjects Who Failed Immediately Prior Irinotecan Therapy (N=22)	KRAS Mutant Subjects Who Failed Prior Irinotecan (N=37)
4 months PFS	34%	32%	38%
6 months PFS	21%	18%	24%
Median PFS (mo)	2.2	3.0	3.0
Response Rate	8%	14%	8%
Disease Control Rate (PR+Stable Disease)	63%	59%	68%

Source: Company reports; Oppenheimer & Co. Inc.

Birinapant could be positioned as third-line treatment for CRC. The standard of care for the treatment of third-line CRC patients is currently regorafenib (Stivarga) developed by Bayer and Onyx Pharmaceuticals (now part of Amgen). While head-to-head comparison of birinapant and regorafenib is not available, anecdotal evidence comparing birinapant Phase I/II study to the pivotal Phase III study of regorafenib suggests that birinapant may be the more effective drug (Exhibit 9).

[13] American Cancer Society. Cancer Facts And Figures 2013. Atlanta: American Cancer Society; 2013.

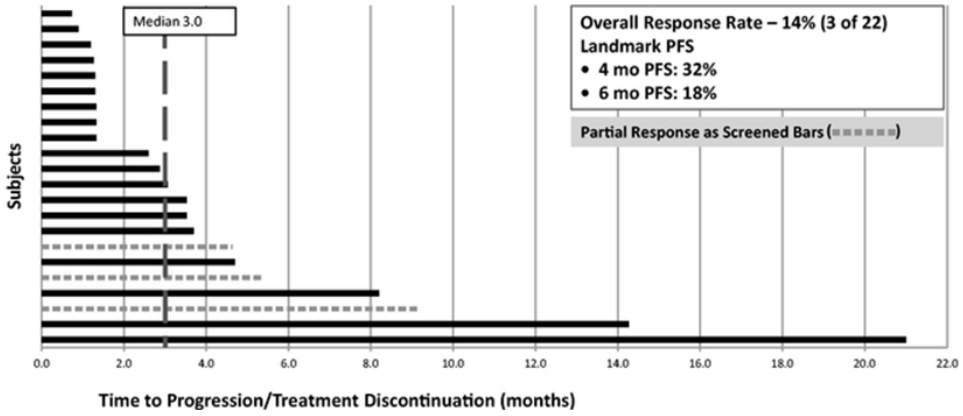
Exhibit 9: Phase I/II Study Of Birinapant With Irinotecan In CRC Patients

Study Population	Placebo (N=255)	Regorafenib (N=505)
4 months PFS	7%	25%
6 months PFS	2%	14%
Median PFS (mo)	1.7	1.9
Median Overall Survival (mo)	5.0	6.4
Response Rate	0%	1%
Disease Control Rate Stable Disease >6 weeks	15%	41%

Source: Grothey A, et al. Regorafenib Monotherapy For Previously Treated Metastatic (CORRECT); An International, Multicenter, Randomized, Placebo-Controlled, Phase 3 Trial. Lancet 2013; 381:303-12.

There are two other aspects of the Phase I/II study of birinapant that we point as supporting points for birinapant's clinical activity. The first is looking is at patients that failed irinotecan therapy immediately before being treated with birinapant+irinotecan. We note that this population would be unlikely to respond to irinotecan, so the results observed signal that birinapant may be re-sensitizing the tumor to irinotecan. See Exhibit 10 below.

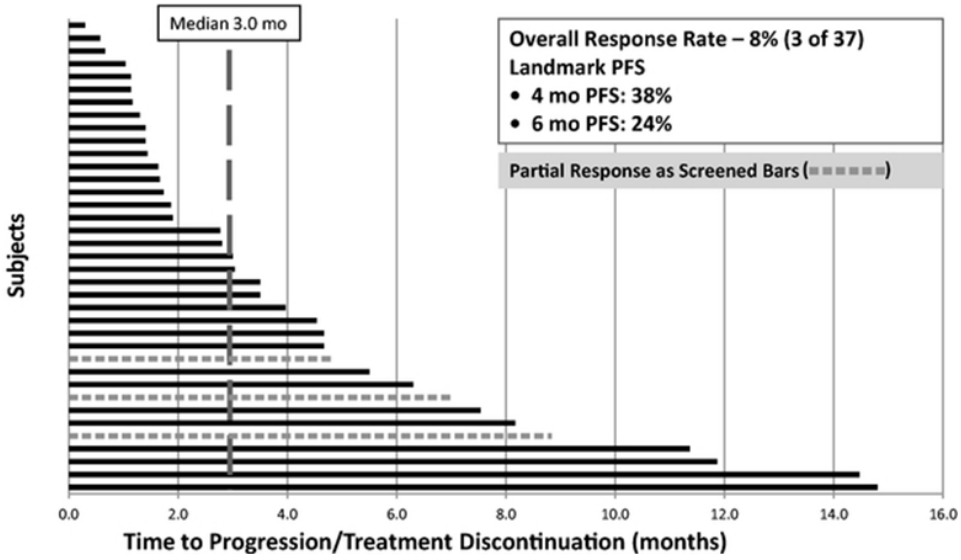
Exhibit 10: Signs of Clinical Activity in Patients that Progressed On Irinotecan Immediately Before Birinapant+Irinotecan Therapy



Source: Company reports.

The other aspect of the Phase I/II study that we find important to note is the sign of clinical activity among KRAS mutant CRC patients. Recall that KRAS mutant gene patients are ineligible for treatment with EGFR antibody therapy. Without EGFR treatment options, these patients are left with fewer treatment options, and therefore there is an unmet need to treat these patients. See Exhibit 11.

Exhibit 11: Signs of Clinical Activity in Patients KRAS Mutant CRC Who Previously Failed Irinotecan



Source: Company reports.

From the safety perspective birinapant was well tolerated, but one unusual side effect observed in the Phase I/II study was Bell's Palsy. For reference, Bell's Palsy is a neurological disorder manifested as isolated facial paralysis that in most cases is acute and self resolving. Grade 2 Bell's Palsy was the most common dose-limiting toxicity (DLT) for birinapant, occurring in 11 patients. Patients improved in two to four weeks and most patients continued on the study. An ascending dose strategy was found to mitigate the risk of Bell's Palsy. Other AEs in the Phase I/II study were largely characteristic of single-agent irinotecan therapy. We note that birinapant led to small increases in Grade 3 anemia and thrombocytopenia versus irinotecan alone. Overall, we characterize the AE profile for birinapant in the Phase I/II study as tolerable for an oncology drug. The AEs seen in the Phase I/II study are detailed in Exhibit 12 below.

Exhibit 12: Adverse Events In The Phase I/II Study Of Birinapant+Irinotecan In CRC

Adverse Event	Subjects with Adverse Events*#	Subjects with Birinapant-related Aes	No. of Grade 1 Events	No. of Grade 2 Events	No. of Grade 3 Events	No. of Grade 4 Events
Abdominal pain	11	2	6	4(1)	1(1)	0
Alopecia	27	3	19(1)	11(2)	0	0
Anemia	27	10	8(5)	19(5)	6(1)	1(1)
Anorexia	28	14	22(12)	11(7)	0	0
Dehydration	21	2	2	13(1)	10(1)	0
Diarrhea	55	6	46(4)	25(4)	8(2)	0
Fatigue	42	18	30(12)	19(8)	4(3)	0
Leukopenia	14	9	4(3)	4(2)	6(2)	6(4)
Nausea	51	25	42(19)	19(11)	2	0
Neutropenia	22	8	1(1)	9(2)	12(3)	14(5)
Peripheral motor neuropathy	10	10	8(8)	6(6)	0	0
Rash	13	13	13(13)	2(2)	0	0
Stomatitis	12	0	12	0	1	0
Thrombocytopenia	25	10	18(8)	14(6)	7(3)	3(1)
Vomiting	37	13	25(11)	18(3)	4	0
Weakness	17	0	15	3	0	0

Note: ( ) denotes number of subjects with birinapant-related AEs.
** Patients may have experienced more than one AE in this category.*
Source: Company reports.

Birinapant For Ovarian Cancer

An ongoing open-label, non-randomized, single-agent Phase II study[14] is evaluating birinapant for the treatment of adult women with relapsed platinum resistant or refractory epithelial ovarian cancer. All patients will receive 47mg/m^2 birinapant intravenous on days 1, 8 and 15 of each 28-day cycle. Primary outcome measures are objective response, including complete and partial response, or disease stabilization for >6 months. The secondary endpoint is overall survival. The study will look for biomarkers predictive of clinical activity and evaluate the tolerability of birinapant.

The study enrolled the first patient in January 2013 is expected to enroll a total of approximately 40 patients. It is being conducted by the National Cancer Institute (NCI). According to ClinicalTrials.gov, the data readout is expected 4Q14.

A Look at Phase II Status

As of the last update in December 2013, the study enrolled 11 patients. Thus far there were two treatment related serious adverse events (SAEs), including Bell's Palsy and adnominal pain. There are no objective responses. For reference, Bell's Palsy is a type of paralysis of the face. Physician consultants we spoke with were uncertain of the connection between SMAC-mimetics such as birinapant and Bell's Palsy.

Ovarian Cancer Overview

It is estimated that there were 22,240 new cases and 14,030 deaths from ovarian cancer in 2013[15]. The incidence of ovarian cancer from 2005-2009 has decreased by 0.9% per

[14] ClinicalTrials.gov Identifier: NCT01681368
[15] American Cancer Society. Cancer Facts And Figures 2013. Atlanta: American Cancer Society; 2013.

year. Ovarian cancer has the highest mortality rate of all gynecologic cancers. Diagnosis tends to occur when the disease has already reached an advanced state. For example, 70% of diagnosed women have stage III or IV disease[16]. Surgery is typically used to remove as much of the tumor as possible. Following surgery, chemotherapy is typically used to further treat advanced cases. Typically front-line therapy involves a platinum and taxane-based chemotherapy, but in the majority of cases the cancer recurs[17].

Birinapant Combination For Ovarian Cancer

As discussed in the berinapant scientific description, TRAIL receptor agonists are an attractive therapeutic target and there is potential synergy with berinapant. Specifically, the TRAIL receptor agonist would trigger the extrinsic apoptosis signal, and berinapant would assist in turning on the caspase signaling cascade within the cell. Amgen's conatumumab is a TRAIL receptor agonist antibody which has shown great safety in clinical studies but did not show efficacy. In preclinical testing the combination of birinapant with conatumumab showed increased activity versus birinapant alone. Amgen believes that the synergy with berinapant is worth investigating, and as such, the company formed a collaboration with TetraLogic.

TetraLogic recently began enrolling patients into a Phase I/II clinical study[18] of birinapant in combination with Amgen's conatumumab (AMG 655) for the treatment of patients with relapsed ovarian cancer. The company commenced the study in November 2013 and data readout from the Phase I/II study is expected in 2Q14. We view this data as a key 2014 catalyst for TLOG shares.

Conatumumab Overview

For reference, conatumumab is a fully human monoclonal antibody that is owned by Amgen. Conatumumab works by partially mimicking endogenous TRAIL by targeting death receptor 5 (DR5) and death receptor 4 (DR4). Conatumumab binds to DR4 and DR5 which induces the formation of a death-inducing signaling complex leading to cell death[19] [20] [21] [22]. It is worth noting that TetraLogic worked in collaboration with Amgen on the clinical evaluation of birinapant conatumumab combination therapy. Neither company has rights to the other's candidate.

Clinical Trial Design

The study is an open-label, non-randomized multi-center dose escalation study of birinapant in combination with conatumumab that will enroll approximately 30 adult female

[16] Roett MA, Evans P. American Academy of Family Physicians (2009). 80(6):609-616.
[17] McGuire WP, et al. Cyclophosphamide And Cisplatin Compared With Paclitaxel And Cisplatin In Patients With Stage III And Stage IV Ovarian Cancer. (1996) New England Journal Of Medicine. 334(1):1-6.
[18] ClinicalTrials.gov Identifier: NCT01940172.
[19] Herbst RS, et al. A First-in-Human Study of Conatumumab in Adult Patients with Advanced Solid Tumors. (2010) Clin Cancer Res. 16:5883-5891.
[20] Ashkenazi A. Directing Cancer Cells to Self-Destruct With Pro-Apoptotic Receptor Agonists. (2008) Nat Rev Drug Discov 7:1001-12.
[21] Ashkenazi A. Targeting The Extrinsic Apoptosis Pathway In Cancer. (2008) Cytokine Growth Factor Rev. 19:325-31.
[22] Ashkenazi A., Herbst RS. To Kill A Tumor Cell: The Potential Of Proapoptotic Receptor Agonists. (2008) J Clin Invest. 118:1979-90.

patients with relapsed epithelial ovarian cancer, relapsed primary peritoneal cancer, or relapsed fallopian tube cancer. The primary outcome is maximum tolerated dose (MTD). A safety expansion stage will evaluate conatumumab in combination with birinapant at the MTD. Approximately 18 patients will enroll in the dose escalation stage of the study and another 12 will enroll in the expansion stage of the study. Currently, one clinical site is enrolling patients, and another six sites are expected to begin enrolling patients in the near future. Given the lack of activity for conatumumab in prior studies, we believe that tumor response in these patients will be largely attributed to birinapant.

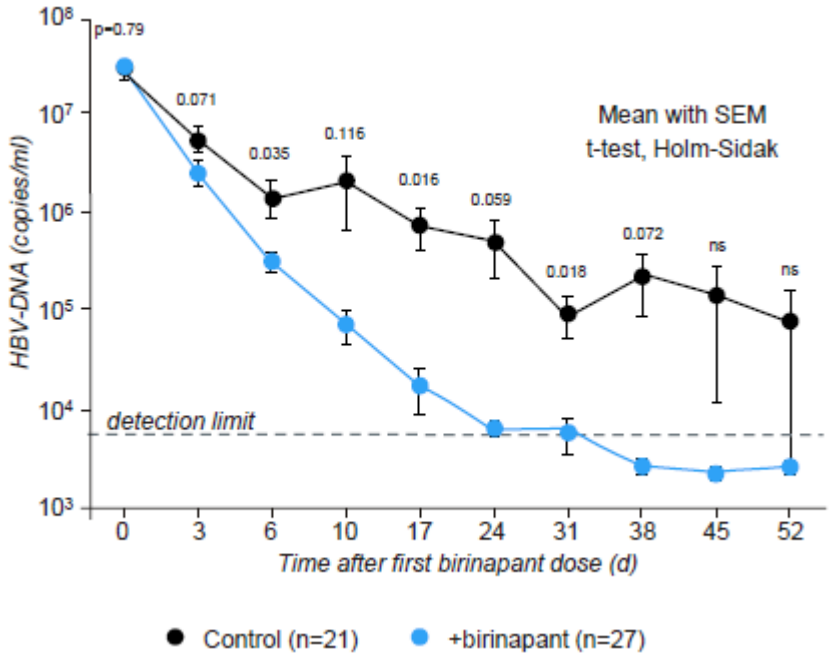
Birinapant For Hepatitis B

TetraLogic expects to commence a Phase I clinical study of birinapant for the treatment of Hepatitis B in 4Q14. The decision to move forward with a clinical study of birinapant in Hepatitis B (HBV) was made following pre-clinical studies that showed that birinapant significantly reduced HBV. Further, when birinapant was combined with the polymerase inhibitor, entecavir (Baraclude), a standard treatment for HBV offered by Bristol-Myers Squibb, the effect was enhanced.

HBV is a virus that leads to inflammation of the liver that can become chronic. In some cases Hepatitis B can cause cirrhosis of the liver, liver failure or liver cancer. It is important to note that HBV is capable of evading detection by the immune system and that one of the key mechanisms for proliferation is dysregulation of apoptosis.

Preclinical studies using a novel mouse model of human HBV were conducted by Dr. Marc Pellegrini at the Walter and Eliza Hall Institute of Medical Research in Australia. In these studies birinapant was associated with a decline in circulating HBV-DNA. See Exhibit 13.

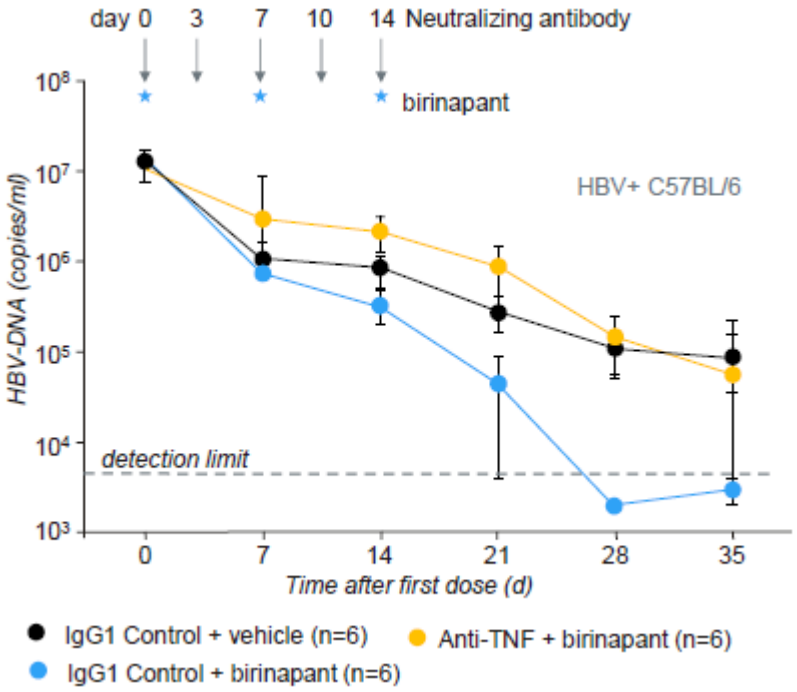
Exhibit 13: Decrease In Circulating HBV-DNA With Birinapant



Source: TetraLogic Pharmaceuticals

Exhibit 14 illustrates that tumor necrosis factor (TNF) is required for birinapant to show efficacy in the mouse model of human HBV. It can be seen in the Exhibit below that anti-TNF+birinapant was not associated with decreased HBV-DNA. It is important to remember that the mechanism of action for birinapant is to convert TNFα from a pro-survival to a pro-apoptotic pathway. The results suggest that birinapant is having an effect on the level of HBV-DNA.

Exhibit 14: TNF Is Required For Birinapant's Efficacy



Source: TetraLogic Pharmaceuticals

Financial Overview

Sales And Earnings Outlook

Our 2014/2015 EPS projections are ($0.95)/($1.15), respectively. Our P&L model and valuation assume a 5M share equity financing in 3Q14. See Exhibit 15 for detailed P&L.

Balance Sheet and Cash Flow

In December 2013, TetraLogic completed its Initial Public Offering. The underwriters exercised 100% of the over-allotment. A total of 8.2M common shares were sold for $7.00 per share, resulting in net proceeds to the company of $50.1M.

Following the IPO, including the over-allotment, the company has ~22.19M common shares outstanding. We note that all of the 8.69M outstanding preferred shares were

converted to common shares prior to the IPO along with the issuance of 2.87M common shares upon the conversion of the company's convertible notes.

As of September 30, 2013 the company reported $2.5M in cash and cash equivalents. Following the IPO, TetraLogic believes that it is sufficiently capitalized to meet its operating initiatives through at least the next 24 months. Historical balance sheet is detailed in Exhibit 16.

Following the IPO there are warrants to purchase 103K shares at an average exercise price of $2.58/share. There are also 736K options to purchase common shares at an average exercise price of $1.40/share and 1.94M options to purchase common shares at an average price of $6.12. Finally, there are 496K options granted to employees following the IPO.

Strategic Investors / Insider Ownership

Upon the expiration of the 180-day lock-up agreement, approximately 17.41M currently restricted common shares will be eligible for sale. Insider ownership of TLOG is significant, with total employee ownership of ~20%, including options. In addition, there are a number of strategic investors in TetraLogic, including affiliates of Pfizer and Amgen. Finally, a number of well known venture capitalists have reported large holdings of TLOG, including Clarus Ventures (4.64M shares), HealthCare Ventures (2.62M shares), Hatteras Venture Advisors (1.21M shares), Novitas Capital (1.54M shares) and Nextech (1.13M shares). We believe that most of these investors plan to hold the shares beyond the lock-up expiration period.

Financial Statements

Exhibit 15: TetraLogic Pharmaceuticals Historical & Projected Income Statement

FY Ending Dec 31st in $000s, except per share amount	FY12A	FY13E	Mar-14 1QE	Jun-14 2QE	Sep-14 3QE	Dec-14 4QE	FY14E	FY15E
Revenue:								
Collaboration revenue	-	-	-	-	-	-	-	-
Grant revenue	-	-	-	-	-	-	-	-
Total Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Operating Expenses:								
General and administration	4,076	6,500	2,500	2,500	2,600	2,500	10,100	12,625
Research and development	12,096	9,000	3,000	3,200	3,300	3,500	13,000	19,500
Total Operating Expenses	**16,172**	**15,500**	**5,500**	**5,700**	**5,900**	**6,000**	**23,100**	**32,125**
Operating income (expense)	**(16,172)**	**(15,500)**	**(5,500)**	**(5,700)**	**(5,900)**	**(6,000)**	**(23,100)**	**(32,125)**
Change in fair value of derivative liabilities	43	(1,335)	-	-	-	-	-	-
Interest and other income	3	0	-	-	-	-	-	-
Interest expense	(73)	(1,575)	-	-	-	-	-	-
Net loss and comprehensive loss	(16,199)	(18,410)	(5,500)	(5,700)	(5,900)	(6,000)	(23,100)	(32,125)
Cumulative preferred stock dividends	(3,453)	(2,566)	-	-	-	-	-	-
Net loss attributable to common stockholders	**(19,653)**	**(20,975)**	**(5,500)**	**(5,700)**	**(5,900)**	**(6,000)**	**(23,100)**	**(32,125)**
Basic and diluted net loss per share	**($1.52)**	**($0.83)**	**($0.25)**	**($0.25)**	**($0.24)**	**($0.22)**	**($0.95)**	**($1.15)**
Weighted average common shares outstanding	10,629	22,189	22,264	22,414	24,989	27,564	24,308	27,939

Source: Company reports, Oppenheimer & Co. Inc.

Exhibit 16: TetraLogic Pharmaceuticals Historical Balance Sheet

Historical Balance Sheet ($000s) ASSETS	FY11A	FY12A	Jun-13 2QA	Sep-13 3QA
Current Assets				
Cash and cash equivalents	10,006	4,512	6,020	2,458
Short-term investments	5,526	-	-	-
Prepaid expenses and other current assets	446	129	262	240
Offering costs	-	-	-	1,958
Restricted cash	20	20	20	20
Total current assets	**15,998**	**4,661**	**6,302**	**4,676**
Long-term assets				
Property and equipment, net	297	172	127	114
Other assets	54	54	54	54
Total long-term assets	**351**	**226**	**181**	**168**
Total Assets	**16,349**	**4,887**	**6,483**	**4,845**
LIABILITIES AND STOCKHOLDER'S EQUITY **Current Liabilities**				
Accounts payable	834	1,145	550	1,162
Accrued expenses	2,463	1,610	2,068	4,059
Convertible notes payable	-	-	10,000	10,000
Derivative liabilities	159	369	907	2,298
Other	34	-	-	-
Total current liabilities	**3,490**	**3,124**	**13,525**	**17,519**
Long-term liabilities				
Convertible notes payable, net	-	4,756	3,000	3,000
Other liabilities	35	30	28	27
Total long-term liabilities	**35**	**4,786**	**3,028**	**3,027**
Total Liabilities	**3,525**	**7,910**	**16,553**	**20,545**
STOCKHOLDER'S EQUITY				
Series A convertible preferred stock	7,848	7,848	7,848	7,848
Series B convertible preferred stock	14,788	14,788	14,788	11,038
Series C convertible preferred stock	36,856	36,856	36,856	34,232
Series C-1 convertible preferred stock	5,920	5,920	5,920	5,920
Common stock, pro forma	2	0	2	0
Additional paid-in capital	1,132	1,486	1,758	8,479
Deficit accumulated during the development stage	(53,722)	(69,922)	(77,243)	(83,218)
Total Stockholder's Equity	**(52,588)**	**(68,435)**	**(75,482)**	**(74,739)**
Total Liabilities and Stockholder's Equity	**16,349**	**4,887**	**6,483**	**4,845**

Source: Company reports, Oppenheimer & Co. Inc.

Management

Officer	Title	Biography
J. Kevin Buchi, MBA	President, CEO	Mr. Buchi was most recently Corporate Vice President, Global Branded Products, at Teva Pharmaceutical Industries Ltd. Prior to joining Teva, he was Chief Executive Officer of Cephalon, Inc., which was acquired by Teva for $8 billion in October 2011. Mr. Buchi joined Cephalon in 1991 and held various positions, including Chief Financial Officer and Chief Operating Officer, before becoming Cephalon's Chief Executive Officer in December 2010. He graduated from Cornell University with a BA in chemistry and received a Master of Management degree from the J.L. Kellogg Graduate School of Management at Northwestern University. Mr. Buchi is a CPA.
C. Glenn Begley, MBBS, PhD, FRACP, FRCPA, FRCPath	CSO, SVP R&D	Until January 2012, Dr. Begley was VP and Global Head of Hematology and Oncology Research at Amgen Inc. He joined Amgen in 2002, and was responsible for building the Hematology and Oncology research program. He also had scientific responsibility for marketed Amgen products which involved preparation and presentations at multiple FDA face-to-face meetings and FDA Drug Advisory Committee meetings. Before joining Amgen, he had over 20 years of clinical experience in medical oncology and hematology. His early studies first described human G-CSF, and in later clinical studies, he first demonstrated that G-CSF-"mobilized" blood stem cells hastened hematopoietic recovery compared with bone marrow transplantation. This finding revolutionized the approach to clinical hematopoietic cell transplantation. His basic research focused on hematopoietic regulation. He defined the function of the CSFs and their receptors using animal models. He was the first to molecularly clone the transcription factor SCL, and demonstrate its critical role in leukemia and normal hematopoiesis. Dr. Begley is Board Certified in Australia as a Medical Oncologist (F.R.A.C.P.), Laboratory Hematologist (F.R.C.P.A., Australia; F.R.C.Path, United Kingdom) and has a Ph.D. in cellular and molecular biology.
Stephen M. Condon, PhD	VP Chemistry	Dr. Condon is Vice President for Chemistry at TetraLogic Pharmaceuticals. Prior to joining TetraLogic Pharmaceuticals in 2004, Dr. Condon was a Group Leader in medicinal chemistry at ViroPharma Corporation where he was involved in the discovery and development of inhibitors of hepatitis C NS5B RNA-dependent RNA polymerase. From 1995-2000, Dr. Condon was a member of the medicinal chemistry group at Rhône-Poulenc Rorer where his work led to the discovery of number of highly active anabolic agents for the treatment of post-menopausal osteoporosis and the elucidation of the bioactive conformation of human parathyroid hormone. In 1994, Dr. Condon received his doctoral degree with Professor Amos B. Smith III at the University of Pennsylvania after completing the total syntheses of rapamycin and demethoxyrapamycin.
James E. Goldschmidt, PhD	VP Commercial Development	Dr. Goldschmidt has over 25 years of experience in oncology and specialty products development, commercialization and business development. Before joining TetraLogic Pharmaceuticals, Dr. Goldschmidt was Executive Director of New Oncology Products and Business Development at Johnson & Johnson. Prior to J&J, he held several senior positions at Wyeth Pharmaceuticals, including Chair of the Oncology Therapeutic Area Leadership Team and Executive Director of Oncology New Business. Jim started his career at SmithKline Beecham, now GlaxoSmithKline plc, where he held Product Director positions in US Marketing and Global Strategic Product Development for oncology and specialty pharmaceutical products. Jim received his undergraduate degree from Villanova University, a MS degree from Drexel University and a PhD from Temple University School of Medicine.
Tony Meehan, PhD, MBA	VP Alliance Management & Operations	Dr. Meehan has been working with both large pharma and small start-up firms for over 20 years. He was most recently Sr. Director of New Venture Development with RedScript Ventures, LLC, an internal venturing group with Johnson & Johnson. Prior to that, as Director of Drug Product Development, he led a group of 50 scientists that supported over 40 investigational drug programs for Janssen Pharmaceuticals. He came to Janssen in 2005 through the acquisition of TransForm Pharmaceuticals, where he was Director of Pharmaceutical Development, and played a leadership role in building TransForm's product pipeline. During his eleven years with Merck & Co., Tony contributed to the development and launch of eight commercial drug and vaccine products. Tony has a BSE in chemical engineering from the University of Pennsylvania, a PhD in chemical engineering from Carnegie Mellon University, and an MBA from the Wharton School of the University of Pennsylvania.
Pete A. Meyers, MBA	CFO	Mr. Meyers was most recently Managing Director, Co-Head of Global Health Care Investment Banking at Deutsche Bank Securities Inc. He joined Deutsche Bank in 2005 after serving six years with Credit Suisse First Boston LLC where he was a Managing Director in Health Care Investment Banking specializing in the biotechnology and pharmaceutical sectors. Prior to that, he worked at Dillon, Read & Co., specializing in health care mergers and acquisitions. Mr. Meyers earned a BS in finance from Boston College and a MBA from Columbia Business School.
Lesley Russell, MBChB, MRCP	COO	Dr. Russell is a hematologist/oncologist with more than 20 years of international pharmaceutical industry experience and leadership in the therapeutic areas of hematology/oncology, neurology, psychiatry, pain and inflammation, respiratory medicine, cardiovascular medicine and stem cell therapy. Dr. Russell was most recently SVP and Global Head, R&D, Global Branded Products for Teva Pharmaceuticals USA. She was appointed to this role upon Teva's acquisition of Cephalon, Inc., where she served as EVP and CMO from 2006 to 2011. She joined Cephalon in 2000 as VP, Worldwide Clinical Research. Prior to Cephalon, she served as VP, Clinical Research at US Bioscience. and held positions of increasing responsibility within the company from 1996 to 1999. From 1995 to 1996, she was a clinical research physician at Eli Lilly U.K. and a medical director at Amgen U.K. from 1992 to 1995. Dr. Russell was trained in hematology/oncology at Royal Infirmary of Edinburgh and at Royal Hospital for Sick Children, Edinburgh. She received an MBChB from the University of Edinburgh, Scotland, is a member of the Royal College of Physicians, United Kingdom and is registered with the General Medical Council, United Kingdom.
Richard L. Sherman, J.D.	SVP Strategic Transactions & GC	Mr. Sherman joined TetraLogic Pharmaceuticals in 2012 and previously provided consulting services to TetraLogic as Vice President, Strategic Partnering and Transactions at Malvern Consulting Group. He spent more than a decade (1976-1989) as Deputy General Counsel of SmithKline Beckman Corporation, was a partner in the law firm of Pepper Hamilton LLP (1990-1992), and was founder and managing officer (1992-2001) of QED Technologies, Inc., a life science business consulting firm. He is a principal in a private SBIC Investment fund, CIP Capital, L.P. and a venture partner in the SCP/Vitalife family of funds in suburban Philadelphia. He is currently a member of the Board of Directors of Functional Technologies Corp., a Vancouver based publicly traded company, Hawaii Biotech, Inc. and Leversense LLC. Mr. Sherman graduated magna cum laude from the University of Nebraska (1968), where he was elected to Phi Beta Kappa. As a Root-Tilden Scholar at the New York University School of Law, he received his JD in 1971.
David E. Weng, MD, PhD	SVP & CMO	Dr. Weng is the Chief Medical Officer for TetraLogic Pharmaceuticals. He began his biotechnology industry career at MedImmune, LLC, and subsequently AstraZeneca. Prior to his industry activities, Dr. Weng was engaged in the practice of medical oncology and cancer research at the Taussig Cancer Center of the Cleveland Clinic Foundation. He is board-certified by the American Board of Internal Medicine in medical oncology, with active state and federal licensing for clinical practice. Dr. Weng graduated from Harvard University, with subsequent MD, PhD, and clinical training at Johns Hopkins University, Johns Hopkins Hospital, and the National Cancer Institute.

Source: Company reports, www.tetralogicpharma.com

Other companies mentioned in this report (prices as of 1/6/14):

Ambit Biosciences Corp. (AMBI-NYSE, $10.36, Not Covered)

Bayer AG (BAYN-XETRA €100.75, Not Covered)

Bristol-Myers Squibb (BMY-NYSE, $52.94, Not Covered)

Clovis Oncology, Inc. (CLVS-NASDAQ, $60.61, Not Covered)

Eisai Co., Ltd. (4523-TYO, ¥4,075, Not Covered)

Infinity Pharmaceuticals, Inc. (INFI-NASDAQ, $12.83, Not Covered)

Johnson & Johnson (JNJ-NYSE, $92.01, Not Covered)

Peregrine Pharmaceuticals, Inc. (PPHM-NASDAQ, $1.75, Not Covered)

Stemline Pharmaceuticals Inc. (STML-NASDAQ, $20.43, Not Covered)

Threshold Pharmaceuticals, Inc. (THLD-NASDAQ, $4.94, Not Covered)

Investment Thesis

TetraLogic Pharmaceuticals Corporation is a clinical-stage biopharmaceutical company focusing on the discovery and development of SMAC-mimetics for the treatment of cancers. The company's lead candidate, birinapant, is being developed for the treatment of myelodysplastic syndromes (MDS), colorectal cancer (CRC), ovarian cancer, and Hepatitis B. The company may commence further studies of birinapant in new indications. We view TLOG as an attractive long-term investment and expect the stock to appreciate as additional clinical data in these and other cancer indications continue to emerge.

Price Target Calculation

Our $19/share 12-18 month price target is based on the assumption TetraLogic will advance birinapant into Phase II testing for myelodysplastic syndromes (MDS) and colorectal cancer (CRC). We also assume several other ongoing birinapant studies, including a Phase I/II study in ovarian cancer and a Phase I study in Hepatitis B. As such, we looked at the valuation of comparable companies that have differentiated assets in a similar stage of development. Based on the comparison to these companies and an anticipated fully-diluted share count of 31M shares at the end of 2014 (this includes a possible financing round and all outstanding options/warrants), and the average comparables valuation of $579M, we arrive at a price target of $19/share for TLOG.

Key Risks to Price Target

Key risks include clinical trial risk, regulatory risk, competitive risk, partnership risk, reimbursement risk, lack of performance/trading history and liquidity and small capitalization risk.

Important Disclosures and Certifications

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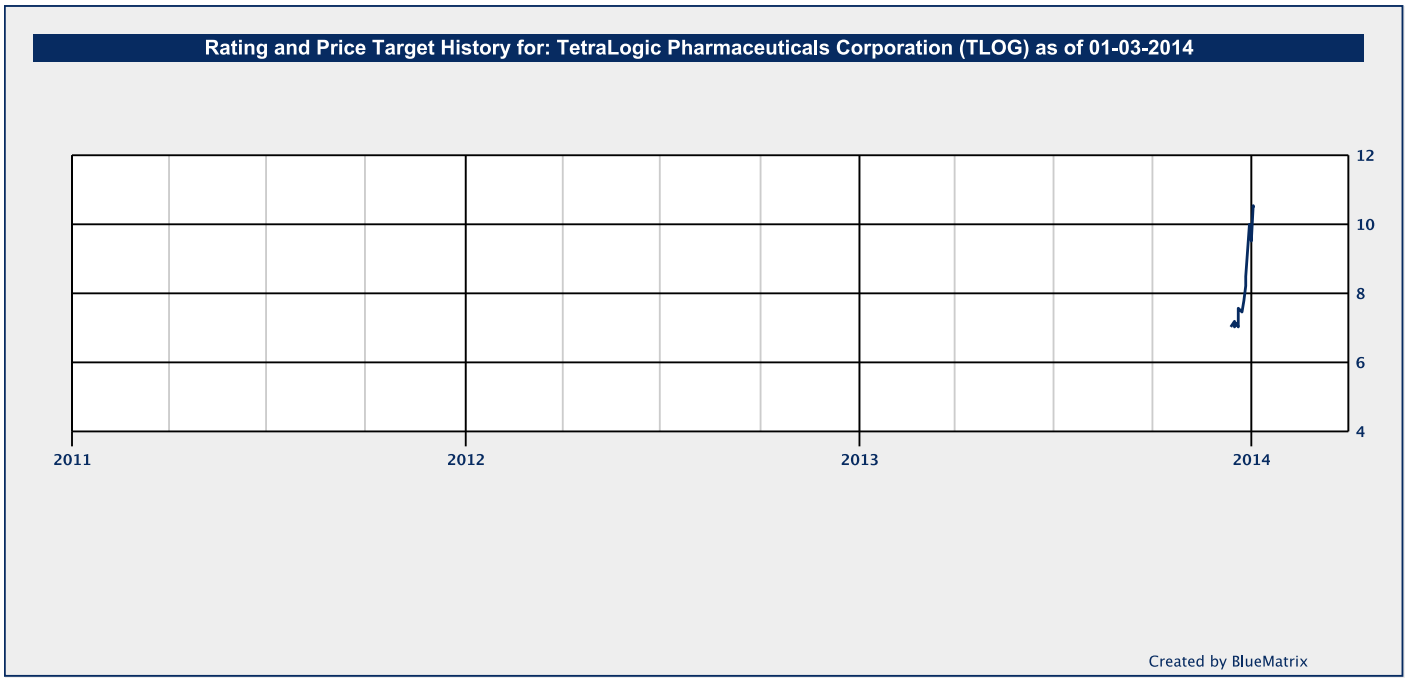
Stock Prices as of January 6, 2014

Amgen Inc. (AMGN - NASDAQ, $114.47, PERFORM)
Celgene Corporation (CELG - NASDAQ, $169.81, PERFORM)
Galena Biopharma, Inc. (GALE - NASDAQ, $5.09, OUTPERFORM)
Idenix Pharmaceuticals (IDIX - NASDAQ, $6.27, PERFORM)
Immunomedics Inc. (IMMU - NASDAQ, $4.92, OUTPERFORM)
Karyopharm Therapeutics (KPTI - NASDAQ, $22.73, OUTPERFORM)
Verastem, Inc. (VSTM - NASDAQ, $12.68, OUTPERFORM)



All price targets displayed in the chart above are for a 12- to- 18-month period. Prior to March 30, 2004, Oppenheimer & Co. Inc. used 6-, 12-, 12- to 18-, and 12- to 24-month price targets and ranges. For more information about target price histories, please write to Oppenheimer & Co. Inc., 85 Broad Street, New York, NY 10004, Attention: Equity Research Department, Business Manager.

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Sell - anticipates that the shares will depreciate 10% or more in price within the next 12 months, due to fundamental weakness perceived in the company or for valuation reasons, or are expected to perform significantly worse than equities within the peer group.

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			IB Serv/Past 12 Mos.	
Rating	Count	Percent	Count	Percent
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PERFORM [P]	289	48.98	94	32.53
UNDERPERFORM [U]	11	1.86	4	36.36

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