TG Therapeutics, Inc. (TGTX)

Creating Best-In-Class Combination Therapies For Cancer. Initiate At Buy.

TG Therapeutics is a clinical-stage biotech focused on developing best-in-class combination therapies for B-cell mediated blood cancers and autoimmune diseases. We believe the company's two late-stage assets, targeting validated pathways (CD20, PI3K-delta), could further improve the treatment landscape for chronic lymphocytic leukemia (CLL), while positive data in non-Hodgkin lymphoma (NHL) and multiple sclerosis (MS) indications could add additional upside. Our NPV-derived PT of $18 implies shares are undervalued.

Developing Combination Treatments At Competitive Prices. We like TGTX's capital-efficient strategy of developing drugs with **(1)** validated targets and **(2)** relatively clean safety profiles to serve as the backbone for proprietary combination treatments with a pricing edge over the competition.

TG-1101 Is A Next-Gen Rituxan Aimed At Improving The Treatment Of High-Risk CLL. **TG-1101** is a CD20 antibody engineered to have enhanced cell-killing ability, relative to Roche's Rituxan (RHHBY, $32.01, NR). While the efficacy bar is high, we believe the response rates seen in Phase I/II trials of TG-1101 in high-risk relapsed CLL are supportive of success in the ongoing Phase III GENUINE trial (ibrutinib ± TG-1101). Though the space is competitive, if approved, we believe TG-1101 could generate ~$250MM in peak sales.

TGR-1202, A Potentially Safer Version Of Zydelig, Is Well-Positioned For CLL And NHL As Part Of The TG-1303 Doublet. **TGR-1202** is a PI3K-delta inhibitor, similar to Gilead's (GILD, $85.26, NR) Zydelig, and its improved side effect profile (less colitis, hepatotoxicity, pneumonitis) makes it a promising candidate for combination treatment of CLL and NHL. Based on encouraging early data from **TG-1303**'s (TG-1101/TGR-1202 combo) Phase I trial in CLL, we are optimistic on the success of the ongoing Phase III Unity-CLL study and model peak sales at over $700MM. Expansion into other indications (DLBCL and indolent NHL) represents upside not in our model.

Though Cancer Has Been The Focus, Success In MS Could Add Upside. An initial Phase II study of TG-1101 in MS is underway which could demonstrate **(1)** shorter infusion times and **(2)** an improved side effect profile. While not in our model given the early stage of development, a successful program could achieve $1B+ peak sales given the sizable $18B+ MS market.

Catalysts To Drive Stock Performance. **(1)** At YE16, TG-1101's Phase II B-cell depletion data in MS. **(2)** In mid-2017, TG-1101's initial ORR data from the Phase III GENUINE study in high-risk relapsed CLL (full list on page 4).

Valuation/Risks. Our $18 PT is based on NPV-based analysis (page 3). Risks to PT include clinical and/or regulatory setbacks (page 37).

Initiate Buy

Price Target: $18.00

Price (May 25, 2016)	$7.78
52-Wk Range	$18.74-$7.07
Market Cap ($M)	$382
ADTV	335,972
Shares Out (M)	49.1
Short Interest Ratio/% Of Float	19.0%
TR to Target	131.4%

Cash Per Share	$1.52
Total Debt	$0.0
Cash And Equivalents ($M)	$85.3

	2015A	2016E		2017E	
		Curr.	Prior	Curr.	Prior
EPS Non-GAAP					
1Q	($0.35)	($0.28)A	--	--	NA
2Q	($0.38)	($0.30)	--	--	NA
3Q	($0.28)	($0.31)	--	--	NA
4Q	($0.37)	($0.32)	--	--	NA
FY	($1.38)	($1.20)	--	($1.35)	--
P/E	NM	NM		NM	
Revenue ($M)					
FY	$0	$0	--	$0	--
P/Sales	--	--		--	
FYE Dec					

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SEE PAGE 40 FOR REQUIRED DISCLOSURE INFORMATION

TGTX Scenario Analysis: Bull / STRH / Bear

Bull Case	STRH Case	Bear Case
• *PT: $31* • *Upside: 317%* • *Probability: ~20%*	• *PT: $18* • *Upside: 144%* • *Probability: ~70%*	• *PT: $3* • *Downside: 66%* • *Probability: ~10%*
• TG-1101 enjoys rapid adoption in high-risk R/R CLL exceeding our $250MM peak sales estimate. • TG-1303 enjoys rapid adoption in CLL and sales surpass our $700MM peak sales estimate. • TG-1101 is approved in MS and achieves ~$1B in WW peak sales. • TGTX reports positive readouts from the UNITY-DLBCL and UNITY-iNHL programs, contributing additional upside to the stock. • Acquisition of TG Therapeutics.	• Our NPV model assumes risk-adjusted estimates for the programs below. • TG-1101 is approved in the high-risk R/R CLL setting with peak sales of ~$250MM. • TG-1303 is approved for CLL and achieves ~$700MM in WW peak sales. • No contribution from other pipeline programs (UNITY-DLBCL, UNITY-iNHL, MS) in our model.	• Clinical and/or regulatory setbacks in TG-1101, TGR-1202, and TG-1303 (combo of TG-1101 and TGR-1202) clinical programs. • TG-1101 and TG-1303 face intense competition in CLL and do not achieve ~$250MM and ~$700MM in sales, respectively.

Source: STRH research. Last updated: 5/26/16

Valuation

Our $18 PT for TGTX is based on sum-of-the-parts (SOTP) net-present-value (NPV) analysis.

- We include probability-adjusted (ranging from 40% to 60%, as shown in the right table) NPV of **(1)** TG-1101 in high-risk R/R CLL and **(2)** TG-1303 in CLL, **(3)** a modest placeholder value for pipeline candidates, and finally **(4)** the company's current net cash position.
- We use a 10% discount rate with NO terminal growth rate, which we believe is appropriate for similar stage companies.
- Based on these assumptions, our NPV suggest a fair value of $18/share, which represents a 137% premium to the current share price.

Sum-of-the Parts (SOTP) NPV Valuation

Products	NPV ($MM)	Probability of Success	NPV Per Share
TG-1101 NPV In CLL	$415	40%	$3
TG-1303 (TG-1101+TGR-1202)	$1,182	60%	$13
Pipeline Value	$50		$1
Net Cash/diluted shares	$85		$2
SOTP			**$18**

Shares Outstanding (MM)	
Basic (as of 5/5/2016)	**49.1**
Fully Diluted (warrants 1.2MM, restricted stock 5.6MM)	**56.0**

Source: STRH research. Last Updated: 5/26/2016

TGTX: *Upcoming Milestones*

Product	Event	Timing
TGTX Portfolio		
Ublituximab/TG-1101 (anti-CD20 antibody)	• B-cell depletion data from a Phase II trial in multiple sclerosis	YE16
	• Complete enrollment for the Phase III GENUINE trial in high-risk R/R CLL	YE16
	• Initial ORR data (on first 200 patients) from the Phase III GENUINE study in high-risk R/R CLL	Mid-2017
	• Initiate a Phase III trial in multiple sclerosis	2017/2018
TG-1202 (PI3K-delta inhibitor)	• Long-term monotherapy efficacy and safety data in CLL and NHL at ASCO (abstract #7512)	June 2016
1303 (TG-1101 + TGR-1202)	• Long-term combo efficacy and safety data in CLL and NHL at ASCO (abstract #7512)	June 2016
	• Initiate the Phase IIb Unity-DLBCL study in R/R DLBCL patients	2Q16
	• Initiate the Phase III Unity-iNHL study	2H16
	• Complete enrollment of first 200 patients (50 patients/arm) in Phase III Unity-CLL study	2017
	• Complete enrollment of additional 250 patients (125 patients/arm) in Phase III Unity-CLL study	2018
	• Initial ORR data from the Phase III Unity-CLL study that would support accelerated approval	Late 2018/Early 2019
	• PFS data from the Phase III Unity-CLL study that would support full approval	2020
anti-PD-L1 antibody	• Initiate clinical program for proprietary anti-PD-L1 antibody	1H17

Source: STRH analysis and Company reports

TGTX: *Novel Cost-Effective Combination Therapies For B-cell Diseases*

TG Therapeutics (TGTX) is a biopharmaceutical company focused on acquiring, developing, and commercializing novel compounds for B-cell mediated hematologic cancers and autoimmune diseases. Management has assembled a portfolio of synergistic compounds targeting validated B-cell pathways for the development of best-in-class combination therapies. The company's two late-stage assets: **(1)** TG-1101, an enhanced CD20 antibody and **(2)** TGR-1202, a PI3K-delta inhibitor with fewer side effects, are being evaluated in chronic lymphocytic leukemia (CLL), non-Hodgkin lymphoma (NHL), and multiple sclerosis (MS). Complementary preclinical programs targeting checkpoint molecules (PD-L1, GITR) and IRAK4 are also underway, with the PD-L1 program expected to enter the clinic in 1H17. TG Therapeutics is headquartered in New York City.

- **Management's Stated Objective Is To Develop Novel Combination Therapies At Competitive Prices.** We like TGTX's focus on developing drugs with **(1)** validated targets and **(2)** relatively clean safety profiles, which could serve as backbone therapy for proprietary (doublet/triplet/quad) combinations, providing a pricing advantage over competitors.

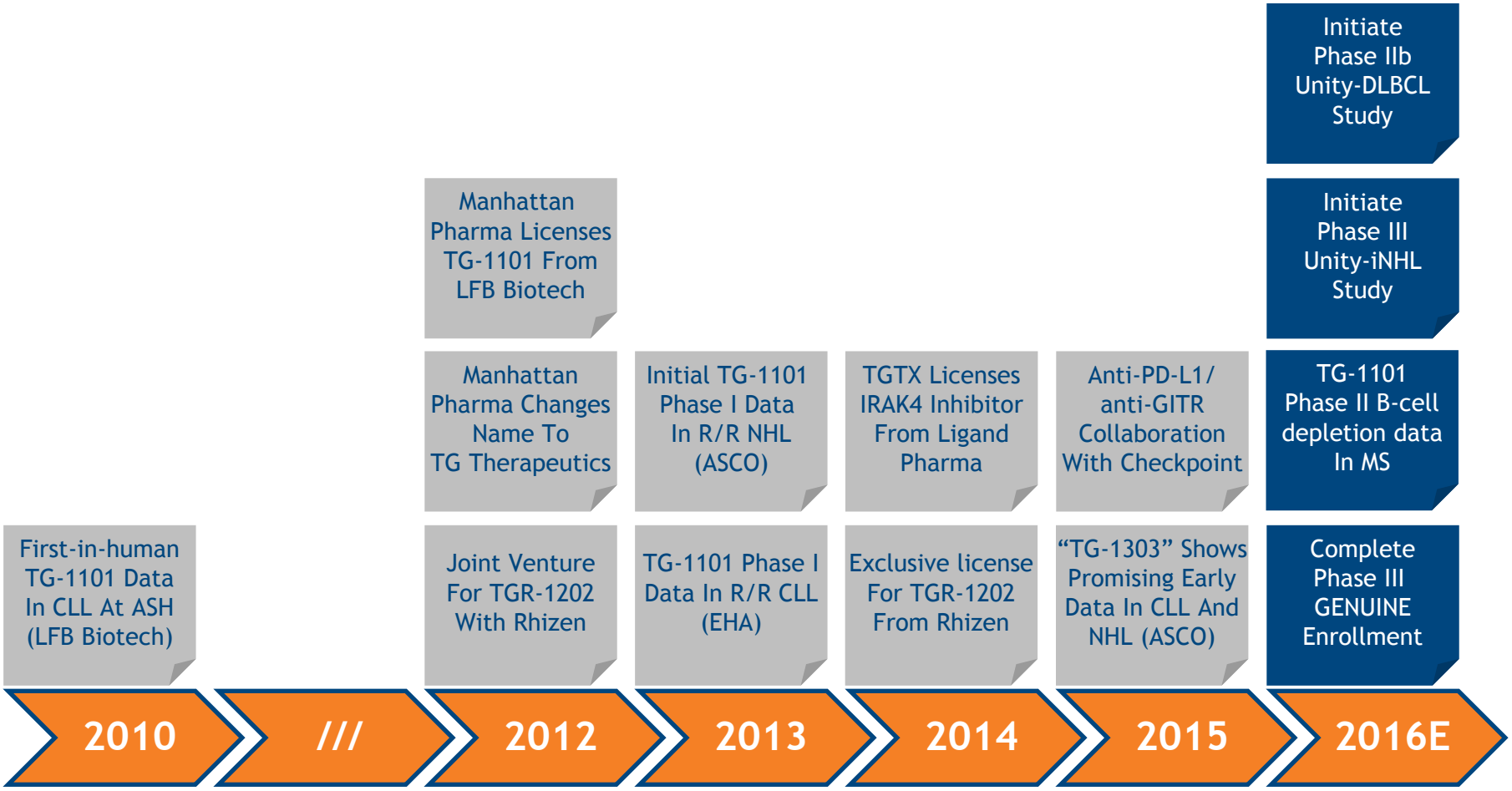
- **TG-1101 Is A Next-Gen Rituxan Designed To Augment The Treatment Of High-Risk R/R CLL...** We believe the response rates seen in TG-1101's Phase I and II studies are supportive of success in the ongoing pivotal Phase III GENUINE study (ibrutinib ± TG-1101) in high-risk R/R CLL. While the efficacy bar is high and the space is competitive, if approved, we believe TG-1101 could achieve over $250MM in peak sales in this indication.

- **…And Success In Multiple Sclerosis Could Add Significant Upside.** An initial Phase II study of TG-1101 in MS is underway. While we have not included the program in our model given the early nature of development, a successful program could represent a potential blockbuster opportunity given the sizable ($18B+) MS market.

- **TGR-1202 Is A Safer Version of Zydelig Well-Positioned In CLL and NHL As Part Of The TG-1303 Doublet.** Like Gilead's Zydelig, TGR-1202 is an oral PI3K-delta inhibitor, but its improved side effect profile (less colitis, hepatotoxicity, pneumonitis) makes it promising for combination therapy. Based on early data from TG-1303's (TG-1101/TGR-1202 combo) Phase I trial, we are optimistic on the success of the ongoing Phase III Unity-CLL and model peak sales at over $700MM. Additional TG-1303 label expansions in DLBCL and indolent NHL could contribute additional value not yet in our model.

- **TGTX's Preclinical Programs Supplement Its Overall Combination Strategy.** To complement TG-1101 and TGR-1202, the company has entered exclusive licensing agreements with **(1)** Ligand Pharma (LGND, $121. 37, NR) for the development and commercialization of IRAK4 (interleukin-1 receptor associated kinase-4) inhibitor technology and **(2)** Checkpoint Therapeutics, a subsidiary of Fortress Biotech (FBIO, $2. 86, NR) for the development and commercialization of anti-PD-L1 and anti-GITR antibody programs in hematological malignancies.

TGTX: *Timeline Of Significant Events*



Source: SEC Filings, STRH Research

TGTX: *R&D Pipeline*

TGTX Portfolio:

1. *TG-1101 (anti-CD20 antibody)*
2. *TGR-1202 (PI3K-delta inhibitor)*
3. *TG-1303 (TG-1101 + TGR-1202 combo)*
4. *Preclinical Candidates (PD-L1, GITR, IRAK4 agents)*

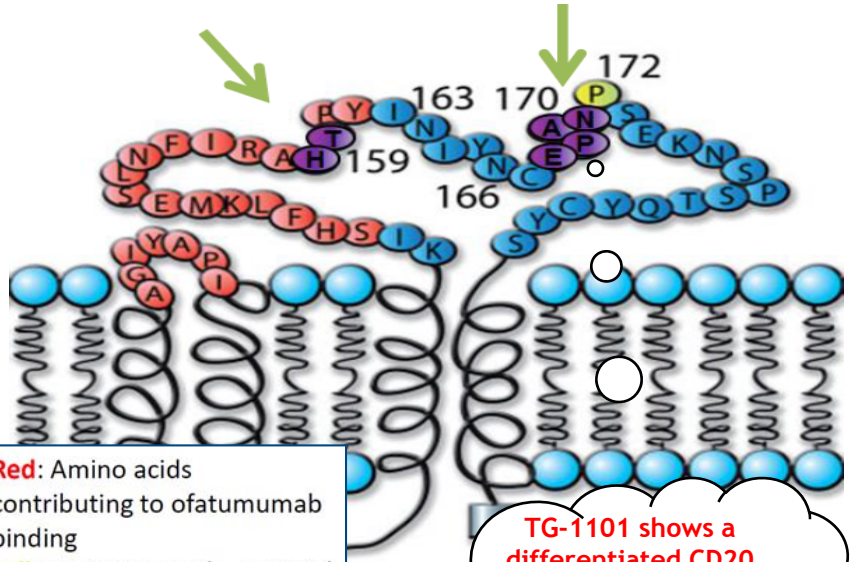
TG-1101 (Ublituximab): *A Novel Glycoengineered CD20 Antibody…*

A Next-Gen Rituxan In Development For Blood Cancers And Autoimmune Disorders

TG-1101 has been glycoengineered (removal of fucose sugars from the Fc region of the antibody to enhance effector cell binding) for increased antibody-dependent cell-mediated cytotoxicity (ADCC) or improved B-cell killing activity similar to other novel anti-CD20 agents (Gazyva, Ocrevus). Also, the drug targets a distinct CD20 epitope which could enable it to overcome resistance to other anti-CD20 agents (see chart on the right for details).

CD20 Antibody	Company	Attributes	Status
Rituxan (rituximab)	Roche	Baseline	Approved for RA, CLL/SLL, iNHL, DLBCL; off-label use in MS
Gazyva (obinutuzumab)	Roche	High ADCC and PCD, Low CDC	Approved for frontline CLL, RR FL Phase III for DLBCL
Arzerra (ofatumumab)	Novartis (NVS, $80.02, NR)	Increased CDC	Approved for CLL Phase III for iNHL
Ocrevus (ocrelizumab)	Roche	Slightly increased ADCC	Phase III in MS
TG-1101 (ublituximab)	TG Therapeutics	Increased ADCC	Phase III in CLL/SLL, Phase II in NHL and MS

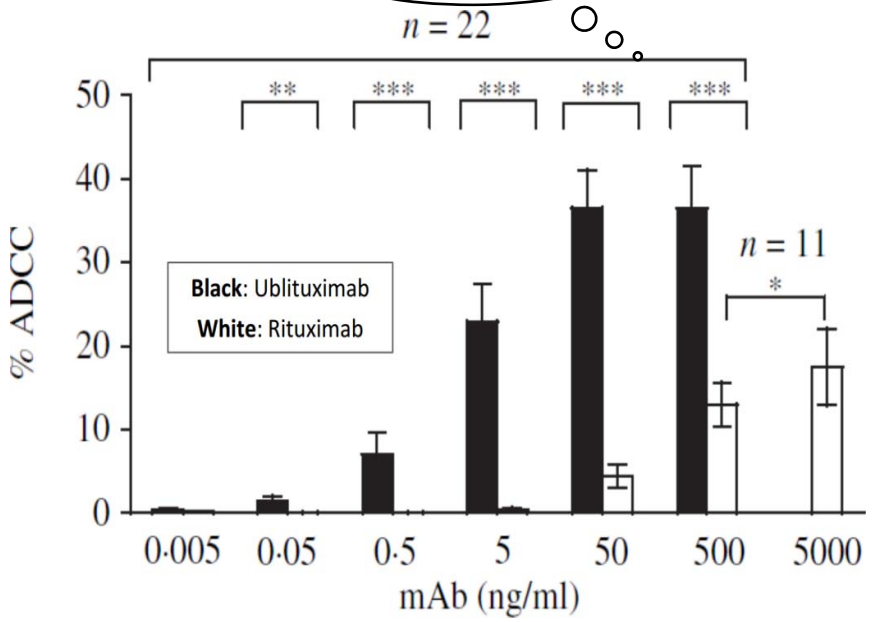
TG-1101 Has Unique CD20 Binding Epitope



Red: Amino acids contributing to ofatumumab binding
Yellow: Amino acids essential for rituximab, but not ofatumumab binding
Purple: Core amino acids of ublituximab epitope

TG-1101 shows a differentiated CD20 antigen binding epitope compared to both ofatumumab and rituximab.

A comparison of TG-1101 vs. rituximab in CLL cells shows higher ADCC for TG-1101.



Source: STRH Research, Company presentations, nih.gov

TG-1101 (Ublituximab): *…For B-Cell Cancers And Autoimmune Disorders*

- **TG-1101's Lead Programs Are In Chronic Lymphocytic Leukemia (CLL), A Competitive Market With An Evolving Landscape.** In the past few years, CLL treatment has advanced considerably with the approvals of AbbVie's (ABBV, $61.55, Buy, John Boris) Imbruvica (ibrutinib) and Venclexta (venetoclax) and Gilead's Zydelig (idelalisib). We expect this market to remain competitive given the recently approved products and emerging CLL pipeline (please see page 23). TG Therapeutics acquired rights to TG-1101 from LFB Biotechnologies, a subsidiary of LFB Group (private, NR) in January 2012.

- **The Pivotal Phase III GENUINE Study Is Aimed At The High-Risk R/R CLL Setting…** The trial is evaluating whether the addition of TG-1101 to the gold standard treatment ibrutinib is superior to ibrutinib monotherapy for patients with high-risk cytogenetics, e.g., del(17p), del(11q), and TP53 mutations. Given ibrutinib monotherapy showed an ORR of ~70% (not including PR with lymphocytosis) in high-risk del(17p) R/R CLL patients and combo with BR (Helios trial) showed an ORR of 83%, we believe an accelerated approval based on ORR from first 200 patients is possible, though the bar for efficacy is likely to be high in the range of ~85%+. Assuming completion of enrollment near YE16, we expect ORR data in mid-2017. If successful, we believe this indication could generate over $250MM in peak sales.

- **…While The Pivotal Phase III UNITY-CLL Study Is For All Lines Of Treatment.** Unity-CLL, which is enrolling CLL patients irrespective of cytogenetics in both frontline and relapsed settings, compares the combination of TG-1101 and TGR-1202 *(TGTX's novel PI3K-delta inhibitor, see page 16)* to Gazyva (obinutuzumab) + chlorambucil (CHL), the standard-of-care for frontline "unfit" CLL patients and also used in other settings. Early Phase I data for the TG-1101/TGR-1202 combo (labeled "TG-1303" by the company) are supportive of success in this indication, and we believe an accelerated approval based on an interim ORR endpoint is possible, while a full approval will have to await PFS data. We expect this larger indication to add peak sales of over $700MM in 2031.

- **Further Upside Could Come From NHL And Autoimmune Disorders.** In 2016, we expect TGTX to initiate registration-directed trials for the TG-1303 doublet in DLBCL (Phase IIb Unity-DLBCL in 2Q16) and indolent NHL (Phase III Unity-iNHL in 2H16). TG-1101 is also in a Phase II study in multiple sclerosis (MS), with data expected later this year. We believe CD20 is a validated target in these diseases, and successful programs in NHL and MS could add significant upside not in our model.

TG-1101: *Phase I/II Monotherapy Data In CLL (and NHL) Were Promising*

First-In-Man Phase I/Ib Data Shows 45.5% ORR…

- In November 2008, LFB initiated a first-in-man, two-part open-label, multicenter study in R/R CLL patients who have received at least one prior course with fludarabine.

Part 1 (n=21): Patients received 4 weekly doses of TG-1101 (LFB-R603) ranging from 5 to 450mg. Cartron et al. presented initial results at 2010 ASH (link to poster).

- Of 18 evaluable pts: there were 5 (28%) PR at week 16 and 3 (17%) PR at week 24, 7 (39%) SD, and 6 (38%) PD.
- AEs included asymptomatic hepatic cytolysis (4 patients), neutropenia (7 cases of grade 3/4 in 6 patients), and infections (1 case considered possibly drug-related). No drug-related AEs were observed after infusions 3 and 4.

Part 2 (n=12): Patients received 8 weekly doses of TG-1101 with an initial dose of 150mg followed by 7 doses at 450mg. They were assessed for response at week 16 and 24 and were followed for 52 weeks. Cazin et al. presented final results at 2013 EHA (link to poster).

- TG-1101 achieved a 45.5% ORR at 6 months (see figure to the right); at one-year follow-up, none of the 5 PR pts had signs of progressive disease.
- Grade 3/4 AEs included neutropenia, infusion reactions, increased ALT/AST, febrile neutropenia, and pancytopenia.

Patients	12
Evaluable	11*
CR	0
PR at M4	7 (63.6%)
SD at M4	4
PD at M4	0
PR at M6	5 (45.5%)

Source: STRH Research, Company Presentations

…While A Phase I/II Study Demonstrated 67% ORR

- In July 2012, TGTX initiated a Phase I/II study in patients with R/R B-cell malignancies (n=35, see enrollment below) previously treated with rituximab. O'Connor et al. presented data at 2014 ASCO (link to poster).

Indolent NHL (20)	CLL/SLL (8)	Aggressive NHL (7)
Follicular (12)	CLL (8)	Mantle Cell (5)
Marginal Zone (8)		DLBCL (2)

- CLL patients received TG-1101 at 600mg or 900mg on Days 1, 8, and 15 for Cycles 1 & 2 followed by monthly infusions for patients with SD or better response starting Cycle 3, and infusions every 3 months starting Cycle 6. NHL patients received doses of 900mg or 1200mg.
- TG-1101 single agent showed significant activity (67% ORR, all PRs) in R/R CLL. The median time to a 50% reduction in absolute lymphocyte count was 1 day. See figure to the right for efficacy by tumor type.

Type	Pts (n)	CR n (%)	PR n (%)	ORR n (%)
CLL	6	-	4 (67)	**4 (67)**
FL	12	2 (17)	2 (17)	**4 (33)**
MZL	6	2 (33)	2 (33)	**4 (67)**
MCL	5	-	-	-
DLBCL	1	-	1 (100)	**1 (100)**
Total	**30**	**4 (13)**	**9 (30)**	**13 (43)**

- No DLTs were observed in 35 patients treated and MTD was not reached. 10 (29%) patients had infusion-related reactions. Grade 3/4 AEs included one case of fatigue while Grade 3/4 lab abnormalities included neutropenia (n=3), thrombocytopenia (n=1), and anemia (n=1).
- **STRH Take:** In our view, TG-1101 showed impressive single-agent activity (67% ORR) in CLL patients previously treated with rituximab and showed a largely clean safety profile.

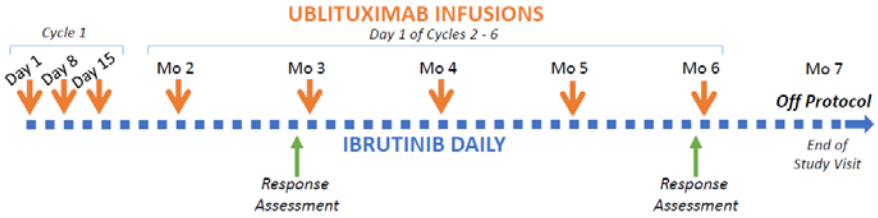
TG-1101: *Phase II Study With Ibrutinib Showed Added Benefit In CLL*

In December 2013, TGTX initiated a Phase II study (NCT02013128) evaluating TG-1101 in combination with ibrutinib in R/R CLL and MCL on the basis of strong Phase I data discussed previously. We will focus our discussion here on CLL.

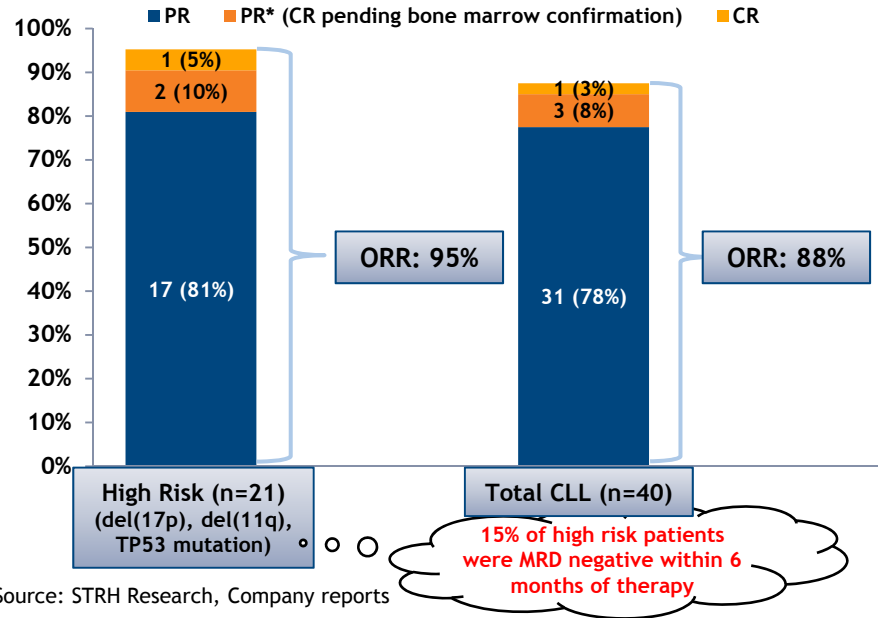
- The study enrolled 44 R/R CLL patients with adequate organ/marrow function at baseline. Prior treatment with BTK and/or PI3K inhibitors were permitted.
- Patients received daily ibrutinib + TG-1101 at one of two doses (600mg or 900mg). TG-1101 was given on Days 1, 8, 15 for Cycle 1 followed by Day 1 of Cycles 2-6 (see study design on the right).
- **Endpoints:** Efficacy assessed at 3 and 6 months: ORR (CR+PR), CR rate and minimal residual disease rate (MRD). Safety was also evaluated.

Phase II Study Design In CLL

	Cycle 1	Cycles 2-6
Ublituximab Cohort 1	**600mg** IV on Days 1, 8, 15	**600mg** IV on Day 1
Ublituximab Cohort 2	**900mg** IV on Days 1, 8, 15	**900mg** IV on Day 1
Ibrutinib	**420mg** PO QD	**420mg** PO QD



Efficacy Data Presented At ICML In June 2015…



Source: STRH Research, Company reports

…Showed Added Benefit Of TG-1101

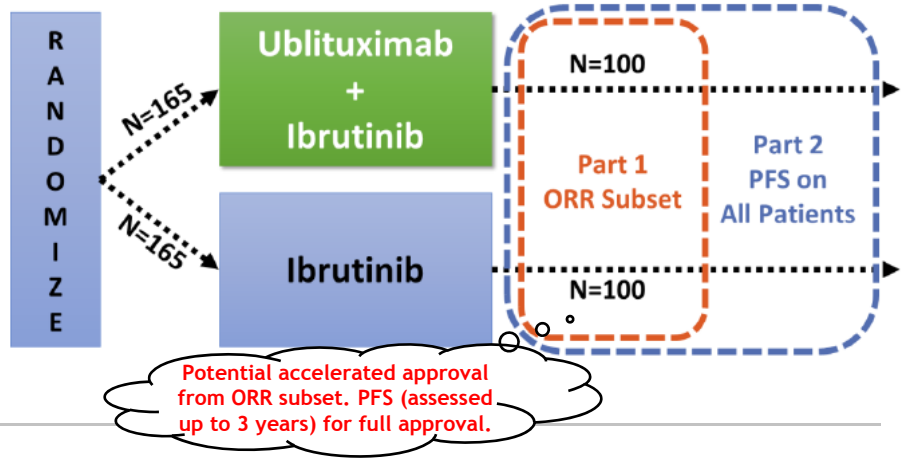
- Initial data were presented at 2014 EHA and ASH, while the most updated data were presented in June 2015 at ICML.
- Of the 44 R/R CLL patients enrolled (median prior Tx=2), 40 were evaluable for efficacy and showed an overall response rate (ORR) of 88% including 31% PR, 8% PR*, and 3% CR. Furthermore, in the high-risk group (n=21 with del(17p), del(11q) and/or p53 mutations), the ORR was 95% including 81% PR, 10% PR*, and 5% CR. (Please see chart on left; PR* is a CR pending bone marrow confirmation.)
- **STRH Take:** We believe these data support an added benefit of TG-1101 to ibrutinib in high-risk R/R CLL patients. Although cross-trial comparisons are difficult, ibrutinib monotherapy showed an ORR closer to ~71% in del(17p) R/R CLL patients.

TG-1101: *Phase III GENUINE Study (w/Ibrutinib) Aimed At High-Risk CLL*

In January 2015, TG Therapeutics initiated the pivotal Phase III GENUINE study (NCT02301156) evaluating TG-1101 in combination with ibrutinib for previously treated high-risk CLL patients. **We expect ORR data in mid-2017.**

- The GENUINE study is enrolling 330 R/R CLL patients with at least one high-risk cytogenetic feature: **(1)** 17p deletion, **(2)** 11q deletion, and/or **(3)** p53 mutation. (Recall in these high-risk patients, TG-1101 produced an ORR of 95% in Phase II.)
- The study design (see figure to the right) and endpoints have been agreed to via a SPA with the FDA.
- **Primary Endpoints:** ORR (assessed at 2 and 5 months) from the first 200 patients for possible accelerated approval. PFS (assessed up to 3 years) on all 330 patients for full approval.
- *Key Catalyst: Look for ORR data potentially in mid-2017.*

GENUINE (UTX-IB-301) Study Schema



Three-Year Monotherapy Ibrutinib Data In CLL…

Best response	TN ≥65 y (n=31)	R/R (n = 101)	R/R del(17p) (n = 34)	All patients (N = 132)
ORR (CR+PR)	24 (77%)	88 (87%)	24 (71%)	112 (85%)
CR	7 (23%)	7 (7%)	2 (6%)	14 (11%)
PR	17 (55%)	81 (80%)	22 (65%)	98 (74%)

- Byrd et al. published (Blood, 2015) 3-year follow-up data of treatment naïve and relapsed/refractory CLL patients. Of the 101 R/R patients, 34 had del(17p) and 35 had del(11q), which are high-risk cytogenetic features per the GENUINE protocol. For the purposes of comparison, we have excluded patients (9%) who had a partial response with lymphocytosis (PR+L) from the overall response rate (ORR).

…Serves As The Benchmark For GENUINE Study

- **STRH Take:** Ibrutinib monotherapy produced an ORR of ~71% (not including PR+L of ~9%) in high-risk del(17p) R/R CLL patients, while the combo with BR (Helios trial, not all pts had poor cytogenetics) showed an ORR of 83%. Recently approved venetoclax showed an ORR of 80% in del(17p) patients. Thus, the efficacy bar for regulatory approval in the GENUINE study is likely 85%+ ORR. However, to be commercially successful, we believe an ORR in the 90%+ range is needed to drive rapid uptake.
- We expect enrollment in the GENUINE study to complete by YE16 with initial data on the ORR subset in mid-2017. Of note, TGTX cannot release ORR data until the trial is fully enrolled.

Source: STRH Research, Company reports

TG-1101: *Market Opportunity In High-Risk R/R CLL*

We assign a 40% probability of success to the ongoing Phase III GENUINE trial and our risk-adjusted NPV analysis suggests TG-1101's high-risk CLL indication is worth ~$3/share.

TG-1101+Ibrutinib Combo In High-Risk R/R CLL…

- We believe the response rates from Phase I and II studies show that the addition of TG-1101 is likely to provide benefit in the high-risk R/R CLL setting, though the bar for regulatory approval could be high. Based on the Phase III GENUINE study design, TGTX is positioning TG-1101 as add-on therapy to ibrutinib for R/R CLL patients with poor cytogenetics: **(1)** 17p deletion, **(2)** 11q deletion, and/or **(3)** p53 mutation.

- From the literature, del(11q) and del(17p) mutations are detected in 5-20% and ~3-8% of CLL treatment naïve patients, respectively. Patients with del(17p) frequently have concurrent TP53 mutations, and the literature suggests another ~1-3% of treatment naïve CLL patients have TP53 mutations alone. Meanwhile, in the refractory setting, the frequency of del(17p) mutations increases significantly, affecting up to 30-50% of patients.

…Could Generate $250MM In Peak Sales

- In the U.S., 19K new cases of CLL are diagnosed each year. Of these approximately 65% of patients are treated in the 1st-line setting. CLL is incurable and despite improvements in initial overall response rates, most patients relapse and require further treatment. We estimate that ~90% are treated in the relapsed/refractory setting. Of these R/R CLL patients, we expect ~10% have del(11q) mutations and conservatively estimate ~30% have del(17p) and/or TP53 mutations for an addressable market of ~4,500 high-risk R/R CLL patients. We further estimate that approximately 95% (~4,300) of these patients would be candidates for TG-1101 and ibrutinib combination therapy.

- We expect TG-1101 to be on the market in 2018 and based on a ~$42K annual price for TG-1101 (similar to Gazya's ~$44K), we expect peak sales of ~$250MM in 2031 on 33% penetration in relapsed CLL high-risk cytogenetics patients.

TG-1101 Revenue Model — CLL ($MM)

U.S. TG-1101 CLL Revenue Model	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
CLL incidence	19,257	19,407	19,559	19,711	19,865	20,020	20,176	20,333	20,492	20,652	20,813	20,975	21,139	21,304	21,470	21,637	21,806
% of CLL patients that are treated in the 1st-line setting	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*
# of CLL patients that are treated in the 1st-line setting	12,517	12,615	12,713	12,812	12,912	13,013	13,114	13,217	13,320	13,424	13,528	13,634	13,740	13,847	13,955	14,064	14,174
% of R/R CLL patients	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*
# of R/R CLL patients	11,265	11,353	11,442	11,531	11,621	11,712	11,803	11,895	11,988	12,081	12,175	12,270	12,366	12,463	12,560	12,658	12,757
% of RR patients that high-risk (del11q, 17p and/or TP53 mutations)	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*	*40%*
# of RR patients that high-risk (del11q, 17p and/or TP53 mutations)	4,506	4,541	4,577	4,612	4,648	4,685	4,721	4,758	4,795	4,833	4,870	4,908	4,946	4,985	5,024	5,063	5,103
% of high-risk RR patients that are treated in relapsed setting	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*	*95%*
# of high-risk RR patients that are treated in relapsed setting	4,281	4,314	4,348	4,382	4,416	4,450	4,485	4,520	4,555	4,591	4,627	4,663	4,699	4,736	4,773	4,810	4,847
TGR-1101 penetration in RR high risk CLL	*8%*	*15%*	*22%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*
# of patients treated with TGR-1101	342	647	957	1,446	1,457	1,469	1,480	1,492	1,503	1,515	1,527	1,539	1,551	1,563	1,575	1,587	1,600
Duration of treatment (months)	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
Months of treatment in the year of diagnosis	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Months of treatment in year 2 of diagnosis	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Cost of treatment/month	$3,500	$3,605	$3,713	$3,825	$3,939	$4,057	$4,179	$4,305	$4,434	$4,567	$4,704	$4,845	$4,990	$5,140	$5,294	$5,453	$5,616
Compliance, including gross to net adjustments	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
TG-1303 sales in elderly CLL patients in year 1 of diagnosis	$12	$24	$36	$56	$59	$61	$63	$65	$68	$71	$73	$76	$79	$82	$85	$88	$92
TG-1303 sales in elderly CLL patients in year 2 of diagnosis	$0	$8	$16	$25	$39	$40	$42	$43	$45	$47	$48	$50	$52	$54	$56	$58	$61
Total TGR-1101 Sales In RR High-Risk CLL	**$10**	**$30**	**$55**	**$80**	**$95**	**$100**	**$105**	**$110**	**$115**	**$115**	**$120**	**$125**	**$130**	**$135**	**$140**	**$145**	**$150**
Total ROW Sales In RR High-Risk CLL ($MM)	**$0**	**$20**	**$45**	**$70**	**$85**	**$90**	**$95**	**$100**	**$105**	**$105**	**$110**	**$115**	**$115**	**$120**	**$110**	**$100**	**$90**
% U.S. sales	*0%*	*60%*	*80%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*80%*	*70%*	*60%*
Total TG-1101 WW Sales In RR High-Risk CLL ($MM)	**$10**	**$50**	**$100**	**$150**	**$180**	**$190**	**$200**	**$210**	**$220**	**$220**	**$230**	**$240**	**$245**	**$255**	**$250**	**$245**	**$240**

Source: STRH Research, Company reports. Last updated: 5/26/2016

TG-1101 NPV — CLL ($MM)

TG-1101 NPV In CLL ($MM)	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
TG-1101 Sales In CLL - U.S.			10	30	55	80	95	100	105	110	115	115	120	125	130	135	140	145	150
YoY (%)				*200%*	*83%*	*45%*	*19%*	*5%*	*5%*	*5%*	*5%*	*0%*	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*	*3%*
TG-1101 Sales In CLL - ROW				20	45	70	85	90	95	100	105	105	110	115	115	120	110	100	90
YoY (%)					*125%*	*56%*	*21%*	*6%*	*6%*	*5%*	*5%*	*0%*	*5%*	*5%*	*0%*	*4%*	*-8%*	*-9%*	*-10%*
Total Revenue	**0**	**0**	**10**	**50**	**100**	**150**	**180**	**190**	**200**	**210**	**220**	**220**	**230**	**240**	**245**	**255**	**250**	**245**	**240**
COGS	-	-	2	8	15	23	27	29	30	32	33	33	35	36	37	38	38	37	36
% of Total Revenues (includes royalties to third party)			*17%*	*16%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
R&D	23	26	23	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2
% of Revenues				*10%*	*5%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*
SG&A	8	13	35	45	50	48	50	50	50	50	50	50	50	50	50	50	50	50	50
% of Revenues				*65%*	*125%*	*60%*	*35%*	*25%*	*24%*	*23%*	*22%*	*21%*	*20%*	*19%*	*18%*	*17%*	*16%*	*15%*	*15%*
Operating Income	**(30)**	**(39)**	**(49)**	**(8)**	**31**	**78**	**101**	**110**	**118**	**127**	**135**	**135**	**144**	**152**	**156**	**165**	**161**	**156**	**152**
Operating Margin						*52%*	*56%*	*58%*	*59%*	*60%*	*61%*	*61%*	*62%*	*63%*	*64%*	*65%*	*64%*	*64%*	*63%*
Tax	-	-	-	-	-	4	8	11	18	25	34	34	36	38	39	41	40	39	38
Tax rate					*0%*	*5%*	*8%*	*10%*	*15%*	*20%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*
NPV Of Free Cash Flow	**(30)**	**(39)**	**(49)**	**(8)**	**31**	**74**	**93**	**99**	**100**	**101**	**101**	**101**	**108**	**114**	**117**	**124**	**120**	**117**	**114**
Years	0.60	1.57	2.55	3.53	4.50	5.48	6.45	7.43	8.40	9.38	10.35	11.33	12.30	13.28	14.25	15.23	16.21	17.18	18.16
Discount Factor	0.94	0.86	0.78	0.71	0.65	0.59	0.54	0.49	0.45	0.41	0.37	0.34	0.31	0.28	0.26	0.23	0.21	0.19	0.18
NPV of Cash Flows	**(28)**	**(33)**	**(39)**	**(6)**	**20**	**44**	**50**	**49**	**45**	**41**	**38**	**34**	**33**	**32**	**30**	**29**	**26**	**23**	**20**

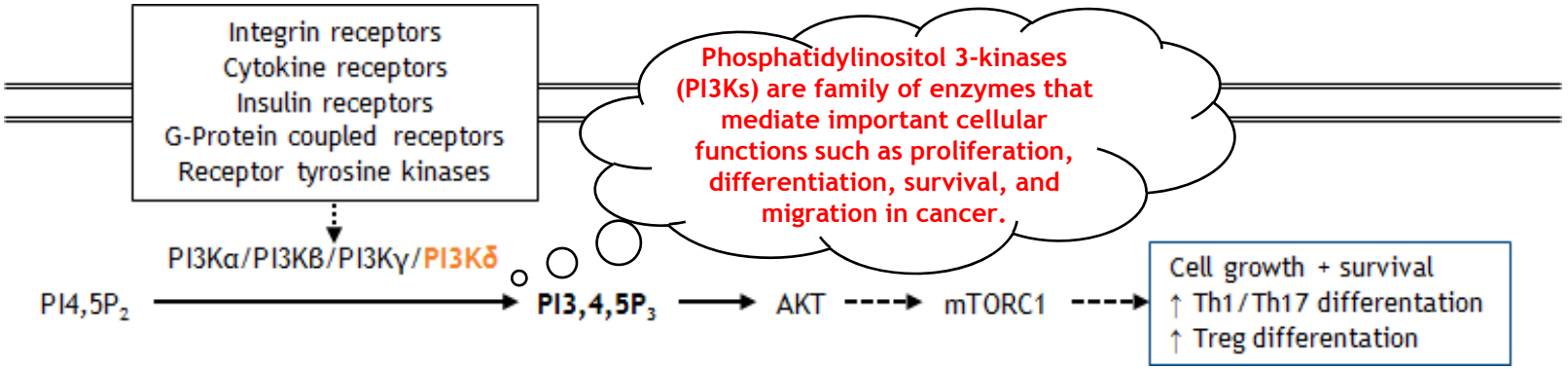
Discount rate	10%
Perpetual Growth Rate	0%
Present Value of Terminal Value	0
Present Value of Cash Flows	415
NPV Per Share	$7
Probability of success	40%
Probability-adjusted NPV/share	$3
Fully Diluted Shares Outstanding	56

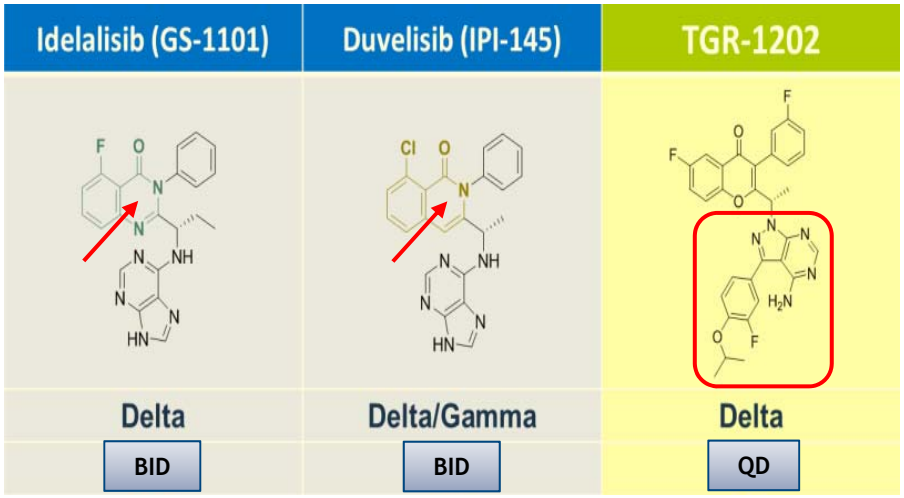
Source: STRH Research, Company reports. Last updated: 5/26/2016

TGR-1202: *A Novel PI3K-Delta Inhibitor…*

TGR-1202 is an oral, once daily, next-gen PI3K-delta inhibitor for hematologic malignancies. While TGR-1202 has shown encouraging single-agent activity, the company's goal is to develop TGR-1202 in combination with TG-1101 (anti-CD20) (this combo is labeled as TG-1303). Since TGTX owns both candidates, this will give favorable commercial dynamics to the company.

- Abnormal activation of the **PI3K/Akt pathway** (see below) has been shown to play a vital role in many tumors. The PI3K-delta isoform, expressed predominantly on leukocytes, was identified as a key therapeutic target in blood cancers and validated by Zydelig's (idelalisib) approval in 2014 for relapsed CLL/SLL and relapsed FL.





Differentiated Structure Helps Mitigate Toxicity

- As shown in the figure on left, compared to other anti-PI3K-delta agents, TGR-1202 has significant structural differences: **(1)** absence of nitrogen-based heterocyclic (red arrows) backbone known to interact with hepatic enzymes and **(2)** a distinct side chain (red box).
- While preserving delta isoform specificity and efficacy, TGR-1202's distinct backbone may help minimize toxicity. Furthermore, TGR-1202 has the advantage of once daily dosing vs. BID dosing for the other anti-PI3K-delta compounds.

Source: STRH Research, Company reports

TGR-1202: …*With A Safety Profile Ideal For Combination Therapy*

- Zydelig' was the first FDA-approved PI3K-delta inhibitor for R/R CLL and FL. In R/R CLL, the addition of idelalisib to Rituxan improved PFS from 5.5 months to 19.4 months. However, significant safety issues (black box warning for hepatotoxicity, diarrhea, colitis, pneumonitis, and intestinal perforation) have led to a limited uptake. More recently, Gilead has discontinued all ongoing studies of Zydelig.
- TGR-1202, similar to idelalisib, specifically targets the delta isoform, which is crucial for mature B-cell development and regulatory T-cell differentiation and function; however, in contrast to idelalisib (and duvelisib), TGR-1202 has shown an improved safety profile in colitis, pneumonitis, and hepatotoxicity (please see chart to the right for details).
- At 2016 AACR, Pinilla-Ibarz et al. (link to poster) presented preclinical data suggesting that the relative preservation of T-reg function vs. idelalisib and duvelisib may account for its improved tolerability profile vs. other PI3K-delta inhibitors.
- **STRH Take:** In our view, TGR-1202 offers a best-in-class safety and tolerability profile well-suited for combination therapy. With an efficacy similar to idelalisib, we believe TGR-1202 is positioned to take share not only from idelalisib (and other PI3K inhibitors that hit the market), but could also become a competitive treatment option (vs. ibrutinib, venetoclax) for R/R CLL as part of combination regimens. Furthermore, at 2015 ASH, Changchun Deng et al. (link to abstract) suggested TGR-1202 had potential synergistic anti-c-Myc activity with proteasome inhibitors, which might be beneficial in DLBCL.

Safety Comparison Of TGR-1202 Vs. Idelalisib

	Idela + Ofa (ASCO '15)[1] (n=173)	Idela +BR (ASH '15 Abstract) [2] (n=207)	Idelalisib Label (CLL & NHL)[3] (n=256)	TGR-1202 (ASH '15) [4] (n=152)
	All Grades (≥Gr 3)	All Grades (≥Gr 3)	All Grades (≥Gr 3)	All Grades (≥Gr 3)
Diarrhea/ Colitis	**49%** (20%)	N/A (7.2%)	**36%** (10%)	**42%** (2%)**
Pneumonia	**17%** (13%)	N/A	**24%** (16%)	**6%** (5%)
ALT Elevations	N/A	**60%** (21%)	**43%** (11%)	N/A
AST Elevations	N/A	**52%** (16%)	**34%** (7%)	N/A
ALT/AST Elevations	**35%** (13%)	N/A	N/A	**6%** (3%)
Discontinuations due to AE	**31%**	N/A	**12%**	**8%**

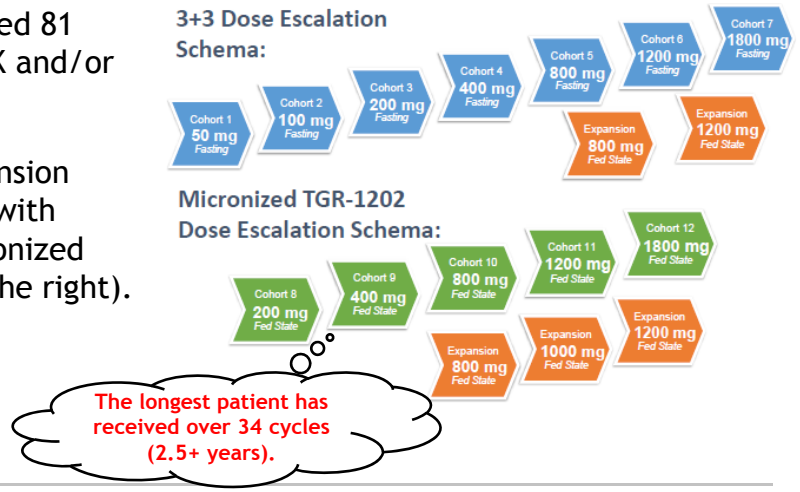
** No observed instances of colitis

Source: Company reports

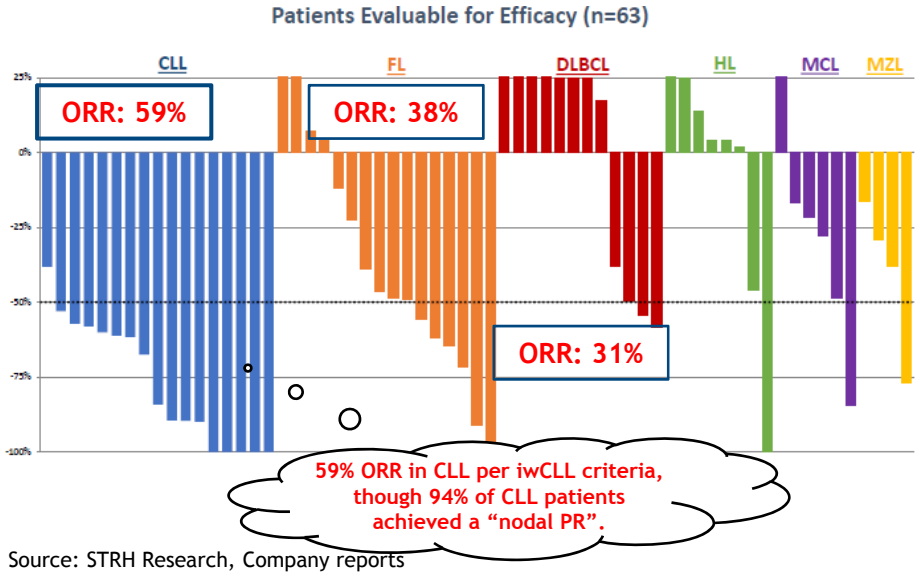
TGR-1202: *Phase I Shows Efficacy And A Differentiated Safety Profile*

In January 2013, TG Therapeutics initiated a first-in-human, Phase I study (NCT01767766) evaluating TGR-1202 monotherapy in patients with relapsed or refractory hematologic malignancies (CLL, B-cell NHL, PTCL, HL).

- As of 2015 ASH (link to poster by O'Connor et al.), the study had enrolled 81 patients with R/R B-cell NHL, CLL, HL, and PTCL. Patients on prior PI3K and/or mTOR agents were excluded from the dose-escalation cohorts.
- **Study Design:** Patients were assigned to 12 dose-escalation and 5 expansion cohorts and received TGR-1202 once-daily in continuous 28-day cycles with doses ranging from 50mg to 1800mg. After Cohort 7, an improved micronized formulation was introduced to increase drug delivery (see diagram on the right).
- **Primary endpoints:** **(1)** safety and **(2)** maximum tolerated dose (MTD).
- **Secondary endpoints:** **(1)** ORR and **(2)** duration of response.



TGR-1202 Efficacy Data Presented At ASH 2015…



Source: STRH Research, Company reports

…Showed Impressive Activity In CLL And FL

- **Efficacy**: TGR-1202 monotherapy showed activity at doses ≥ 800mg of initial formulation and at all micronized doses. Of 17 evaluable R/R CLL patients, 59% (10/17) achieved ORR while 94% (16/17) achieved a "nodal PR". Of 16 evaluable R/R FL patients, 38% (6/16) achieved a preliminary ORR with a median tumor reduction of ~48%. Median PFS for CLL and iNHL was 24 and 27 months, respectively.
- **Safety**: Compared to idelalisib monotherapy in CLL and iNHL Phase I studies, TGR-1202 had fewer **(1)** discontinuations (7% vs. 9-13%) due to AEs, **(2)** cases of Grade 3+ pneumonia (5% vs. 16-20%), **(3)** Grade 3+ colitis events (0% vs. 5.6%), and **(4)** Grade 3+ AST/ALT elevations (2% vs. 2%-25%).
- **STRH Take:** We view TGR-1202's safety profile as somewhat differentiated from other PI3K-delta inhibitors that have problems with colitis and hepatotoxicity (particularly in NHL).

TG-1303: *Backbone For Proprietary Combinations In B-cell Cancers*

TGTX's "Unity" program is evaluating the company's proprietary doublet TG-1303 (TG-1101 + TGR-1202) in B-cell cancers including chronic lymphocytic leukemia (CLL), diffuse large B-cell lymphoma (DLBCL), and indolent non-Hodgkin lymphoma (iNHL). TG-1303 could potentially serve as backbone therapy in triplet and quad combination regimens.

- **The Pivotal Phase III UNITY-CLL Study Is For All Lines Of Treatment.** The Unity-CLL study will compare TG-1303 to Gazyva (obinutuzumab) + chlorambucil (CHL), the standard-of-care for frontline "unfit" CLL patients and also used in other settings. TG-1303's early Phase I data (~80% ORR in heavily pretreated patients) are supportive of success. While an accelerated approval based on an interim ORR endpoint is possible, we believe uptake will likely await PFS data which could take up to ~3 years after full enrollment. We model sales starting in 2021 with a peak estimate of >$700MM in 2031.

- **Additional Registration-Directed "Unity" Trials In DLBCL And Indolent NHL Could Expand The TG-1303 Opportunity.** We expect the Unity-DLBCL trial to initiate in 2Q16. Early data from TG-1303's Phase I trial have shown some efficacy in DLBCL patients with the GCB subtype (~33% ORR), broadly in-line with several novel agents. We believe a successful program could add ~$200MM in upside. Meanwhile, the Unity-iNHL trial is expected to initiate in 2H16.

- **TG-1303's Safety Profile Could Help It Become Backbone In Novel Combination Treatments…** In addition to the above doublet studies, TG-1303 is also being tested in triplet combinations with ibrutinib (NCT02006485) and Merck's (MRK, $56.58, Buy, John Boris) Keytruda (pembrolizumab) (NCT02535286). In comparison to the TGR-1202 + obinutuzumab + chlorambucil triplet which showed significant neutropenia (78%), thrombocytopenia (78%), and hepatotoxicity (39%) in a Phase I study, early data from the TG-1303 + ibrutinib triplet showed a relatively safe profile suggesting that TG-1303 might be appropriate for backbone therapy in triplet and quad combinations.

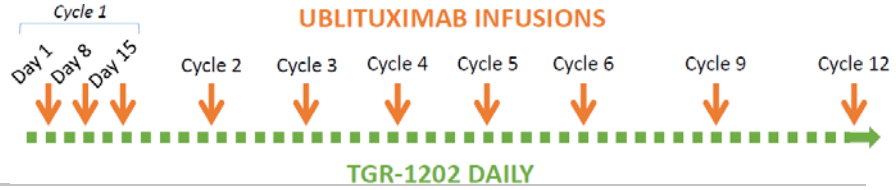
- **…And Proprietary Triplet And Quad Treatments Could Bring Substantial Pricing Advantages, The Crux Of TGTX's Strategy.** To complement TG-1101 and TGR-1202, the company has ongoing preclinical programs targeting PD-L1, GITR, and IRAK4. Management is particularly enthusiastic about the PD-L1 program and guided for a novel candidate to enter the clinic in 1H17. The candidate would be only one of two PD-L1 molecules along with Merck KGaA's (MKGAY, $33.47, NR)/Pfizer's (PFE, $34.56, Hold, John Boris) to retain ADCC activity. TGTX also has plans for a second generation PD-L1 candidate "glycoengineered" for further enhanced ADCC activity. In our view, the TG-1303 + pembrolizumab trial is likely to provide a good read-through for how well TG-1303 combines with checkpoint inhibitors including the novel PD-L1 candidate, and we await further data to provide more clarity on TG-1303's potential as backbone in proprietary triplet and even quad combination treatments. *If successful, these proprietary combos could be favored in many environments which are becoming ever more sensitive to price.*

TG-1303: *Phase I Data Supports Combo Therapy In CLL and NHL*

In November 2013, TG Therapeutics initiated a Phase I/Ib study (NCT02006485) evaluating the combination of TG-1101 and TGR-1202 in patients with relapsed or refractory CLL and NHL (including DLBCL, FL, MZL, and MCL).

- As of 2015 ASH (link to poster by Lunning et al.), the study has enrolled 71 heavily pre-treated patients with CLL and NHL.
- **Study Design (two parts):** Phase I: "3+3" dose escalation in 7 cohorts evaluating Cycle 1 dose limiting toxicities (DLTs). Phase Ib: dose expansion. Patients will receive TGR-1202 daily *AND* TG-1101 infusions on Days 1, 8, and 15 of Cycle 1 and Day of 1 of Cycles 2-6, 9, and 12. (Please see diagrams on the right for detailed dosing schedules).
- **Key endpoints: (1)** safety and maximum tolerated dose (MTD), **(2)** efficacy (ORR, time to response, duration of response, PFS) assessed at week 8, and every 12 weeks thereafter.

Cohort	Ublituximab NHL Dose	Ublituximab CLL Dose	TGR Dose (QD)
1	900 mg	600 mg	800 mg
2	900 mg	600 mg	1200 mg
3	900 mg	900 mg	400 mg (micronized)
4	900 mg	900 mg	600 mg (micronized)
5	900 mg	900 mg	800 mg (micronized)
6	900 mg	900 mg	1000 mg (micronized)
7	900 mg	900 mg	1200 mg (micronized)
Expansion	*TGR-1202 at 800 mg, 1000 mg, and 1200 mg micronized*		



TG-1303 Efficacy Data Presented At ASH 2015…

Type	Patients Exposed to TGR-1202 Higher* Doses					
	Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)
CLL/SLL	10	1	7	**8 (80%)**	2	-
DLBCL	16	3	2	**5 (31%)**	2	9
FL/MZL	17	4	8	**12 (71%)**	4	1
MCL	2	-	-	**0**	-	2
Richter's	1	-	1	**1 (100%)**	-	-

*Higher Dose = 1200 original formulation and 600 or > micronized

- Of note, CLL: 75% had high-risk cytogenetics (17p and/or 11q deletion); FL: 75% were exposed to ≥3 prior therapies; DLBCL: 94% were refractory to prior regimen (69% to rituximab).

…Showed Notable Activity In CLL, iNHL, and DLBCL

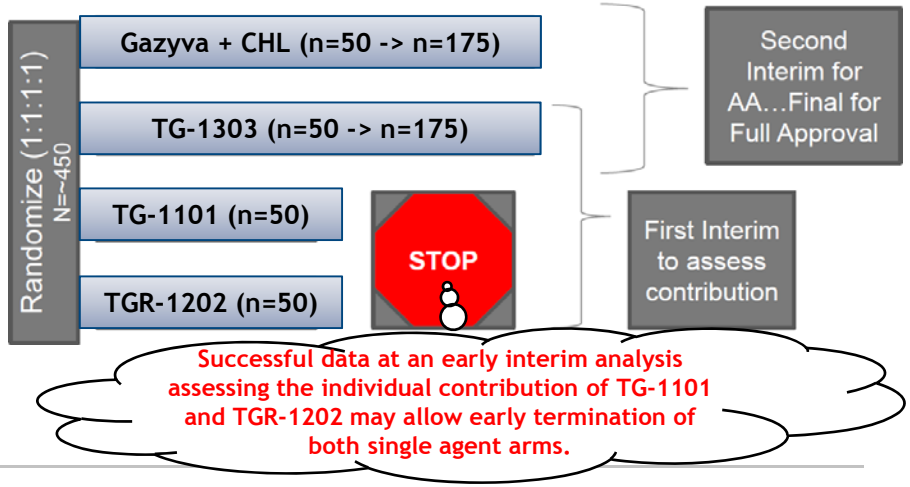
- **Efficacy**: 80% of CLL and 71% of iNHL (FL/MZL) patients achieved ORR. Of 16 evaluable DLBCL patients, ORR was reached by 33% GCB, 0% ABC, and 50% unknown subtypes. The overall median time on study is 8+ cycles with 57% of evaluable patients (n=58) having received 6+ cycles.
- **Safety**: Discontinuations due to AEs have been low at 6/71 (8%), and while 25% of patients had Grade 3/4 neutropenia, only 3% had Grade 3/4 elevations in AST/ALT and there were no cases of colitis. 7 patients had reductions in TGR-1202 dosing due to diarrhea (n=2), neutropenia (n=2), nausea (n=1), fatigue (n=1), and dizziness (n=1).
- **STRH Take**: In our view, TG-1303's efficacy and safety profile supports the ongoing pivotal Phase III Unity-CLL study as well as the planned registration-directed Phase IIb Unity-DLBCL and Phase III Unity-iNHL studies.

Source: STRH Research, Company reports

TG-1303: *Unity-CLL Targets All Lines Of CLL; Early Approval Is Possible*

In January 2016, TG Therapeutics initiated the pivotal Phase III Unity-CLL study (NCT02612311; under SPA with the FDA) evaluating TG-1303 (TG-1101/TGR-1202 combo) vs. Gazyva (obinutuzumab) + chlorambucil (CHL) across all CLL settings.

- **Study Design (two parts):** Part 1: ~50 patients/cohort: **(1)** Gazyva+CHL, **(2)** TG-1303, **(3)** TG-1101 and **(4)** TGR-1202. At the first interim analysis, the TG-1101 and TGR-1202 single agent arms will be assessed for contribution vs. TG-1303 and could be terminated early. Part 2: Will recruit an additional 125 patients/arm for the remaining two arms.
- **Endpoints:** While PFS (assessed up through 3 years) is the primary endpoint and would be required for a full approval, an accelerated approval based on ORR at the second interim analysis (~5-6 months post-enrollment) could be possible.
- *Enrollment to complete in 2018; ORR data in 2H18/1H19.*



An Early Approval Based On ORR Is Possible

- While a cross-trial comparison is difficult, we believe 1303's promising Phase I data of ~80% ORR in **heavily pretreated** patients is favorable compared to Gazyva + CHL's ~78% ORR in **previously untreated** patients from Roche's CLL11 study. *In our view, the two CD20 agents (TG-1101, Gazyva) are likely to contribute relatively similar efficacy, while we expect TGR-1202 to be superior to CHL. Thus, we believe TG-1303 could show a higher ORR vs. Gazyva + CHL at the second interim analysis, which would be supportive of an accelerated approval.* Given the mix of patients across all lines of treatment, we expect ORR for the Gazyva + CHL arm to be around 65-70% (lower than in the CLL11 study), while we expect TG-1303's ORR to be in the 80-85% range.

Source: STRH Research, Company reports

Unity-CLL Market Opportunity

- We view the opportunity for TG-1303 as sizable given the combo is positioned across all CLL settings. If the Phase III UNITY-CLL study is successful, we believe TG-1303 would likely become the preferred regimen in the frontline unfit setting replacing Gazyva+ CHL and could also become the 2nd preferred treatment in the R/R setting (except for del(17p)/TP53 patients where it would likely be 3rd line) depending on the safety profile (more on page 22).
- We are optimistic on TG-1303 and model peak sales of over $700MM. We believe an accelerated approval is possible on interim ORR data, but we conservatively model uptake starting in 2021 based on PFS data, which we view as the key driver of adoption. **Our risk-adjusted NPV analysis suggests TG-1303 is worth ~$13/share.**

TGTX's Product Positioning In the Crowded CLL Landscape

Looking at the top 5 CLL regimens (in order of preference), a few themes emerge:

- **Ibrutinib** is the top preferred treatment **(1)** in the frontline setting for patients with del(17p)/TP53 mutations and **(2)** in the R/R setting regardless of cytogenetics or functional status. Also, ibrutinib is the 2nd preferred treatment in the frontline setting for unfit patients with either regular cytogenetics and del(11q).
- **Obinutuzumab + chlorambucil** (the active control in the UNITY-CLL study) is the top preferred treatment in the frontline setting for unfit patients with either regular cytogenetics and del(11q).
- **Idelalisib + rituximab** is the 2nd preferred treatment across the R/R settings except for patients with del(17p)/TP53 mutations, where it has recently been replaced by **venetoclax**.

	High-Risk Cytogenetics			Regular Cytogenetics	
	del(17p)/TP53 mutation	del(11q)			
	Fit or Unfit	**Fit**	**Unfit**	**Fit**	**Unfit**
Frontline CLL	• Ibrutinib • HDMP + rituximab • FCR • FR • Obinutuzumab + chlorambucil	• FCR • Bendamustine ± rituximab • PCR • Obinutuzumab + chlorambucil	• Obinutuzumab + chlorambucil • Ibrutinib • Ofatumumab + chlorambucil • Rituximab + chlorambucil • Bendamustine ± rituximab	• FCR • FR • PCR • Bendamustine ± rituximab	• Obinutuzumab + chlorambucil • Ibrutinib • Ofatumumab + chlorambucil • Rituximab + chlorambucil • Bendamustine (avoid in frail pts)
	Fit or Unfit	**Fit**	**Unfit**	**Fit**	**Unfit**
Relapsed/ refractory CLL	• Ibrutinib • Venetoclax • Idelalisib + rituximab • Idelalisib • HDMP + rituximab	• Ibrutinib • Idelalisib + rituximab • Idelalisib • FCR • PCR	• Ibrutinib • Idelalisib + rituximab • Idelalisib • Bendamustine ± rituximab • Reduced-dose FCR	• Ibrutinib • Idelalisib + rituximab • Idelalisib • FCR • PCR	• Ibrutinib • Idelalisib + rituximab • Idelalisib • Bendamustine ± rituximab • Reduced-dose FCR

Market addressed by Phase III GENUINE — **TG-1101 + ibrutinib (high-risk R/R CLL)**

Market addressed by Phase III UNITY-CLL — **TG-1303 (all settings)**

STRH Take:

- If the Phase III GENUINE trial is successful, we believe TG-1101 is highly likely to be added to ibrutinib regimens in relapsed patients with high-risk cytogenetics in the relapsed setting.
- If the Phase III UNITY-CLL study is successful, we believe TG-1303 would likely become the preferred regimen in the frontline unfit setting replacing obinutuzumab + chlorambucil and also could become the 2nd preferred treatment in the R/R setting (except for del(17p)/TP53 where it would likely be 3rd line) replacing idelalisib + rituximab on better safety.

Source: STRH Research, NCCN Guidelines, Company Reports

Competition In CLL Likely To Remain High With Influx Of Emerging Agents

The CLL Space Is Crowded And Highly Competitive. In our view, the anti-CD20 space (rituximab, obinutuzumab, ofatumumab) in CLL is highly competitive and dominated by rituximab, which was first approved for B-cell malignancies in 1997. Rituximab is used in all CLL settings, e.g., as part of FCR (fludarabine, cyclophosphamide, and rituximab) – in frontline fit patients; in combo with chlorambucil in frontline unfit; and in various combinations (e.g., idelalisib, bendamustine) in the relapsed and refractory setting. Obinutuzumab, a next-gen rituximab, has shown some benefit in the frontline unfit setting though uptake has been slow. We believe anti-CD20 differentiation will be important, especially as rituximab will go off-patent in the 2018 timeframe.

Similarly, we expect TGR-1202 to compete with PI3K inhibitors from Gilead's Zydelig (idelalisib) and Infinity Pharma's (INFI, $5.16, NR) duvelisib (IPI-145). While Zydelig has demonstrated a solid ORR (72%) and PFS (16 months), its side effect profile (colitis, diarrhea, hepatotoxicity) limits its uptake. Also, we believe AbbVie's ibrutinib (BTK inhibitor; FDA approved for MCL, CLL, WM) and venetoclax (BCL-2 inhibitor; FDA approved for del(17p) R/R CLL) and AstraZeneca's (AZN, $29.98, NR) acalabrutinib (next-gen BTK inhibitor) will be dominant players in the CLL space. Furthermore, a number of companies are developing novel agents targeting CD19 and other B-cell associated targets, CAR-T immunotherapy, and other B-cell ablative therapies which could compete with TG-1101 and/or TGR-1202.

Select Novel CLL Therapeutics

Drug	Mechanism	Company	Phase	Compound	Delivery
Acalabrutinib	BTK inhibitor	AstraZeneca	III	Small Molecule	Oral
Duvelisib	Dual PI3K-γ/δ inhibitor	Infinity Pharma	III	Small Molecule	Oral
Revlimid	Immunomodulatory/Antiangiogenesis	Celgene (CELG, $106.91, BUY)	III	Small Molecule	Oral
CC-122	CRBN-binder	Celgene	II	Small Molecule	Oral
CTL019	Anti-CD19 CAR-T	Novartis	II	Cellular	IV
Entospletinib	Spleen tyrosine kinase (syk) inhibitor	Gilead	II	Small Molecule	Oral
Lirilumab	anti-KIR (Killer Immunoglobulin-like Receptor)	Bristol-Myers Squibb (BMY, $70.78, BUY, John Boris)	II	Monoclonal Antibody	IV
MOR208	CD19	MorphoSys (MOR:ETR, €49.99, NR)	II	Monoclonal Antibody	IV
PNT2258	BCL-2 inhibitor	ProNAi (DNAI, $6.14, BUY, Edward Nash)	II	DNAi antisense	IV
BI 836826	CD37	Boehringer Ingelheim (Private, NR)	I/II	Small Molecule	IV
Imprime PGG	Immune system activator	Biothera (Private, NR)	I/II	Carbohydrate	IV
Monalizumab	anti-NKG2A	Innate Pharma (IPH:PAR, €13.05, NR)	I/II	Monoclonal Antibody	IV
Keytruda	anti-PD-1	Merck	I/II	Monoclonal Antibody	IV

Source: STRH Research, BioMedTracker, Company Websites

TG-1303 Revenue Model — CLL ($MM)

TG-1303 CLL Revenue Model

Frontline CLL patients - Elderly (>65yo)	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
CLL incidence	19,257	19,407	19,559	19,711	19,865	20,020	20,176	20,333	20,492	20,652	20,813	20,975	21,139	21,304	21,470	21,637	21,806
% of frontline CLL patients that are elderly/unfit (>65yo)	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*	*70%*
# of frontline CLL patients that are elderly/unfit (>65yo)	13,480	13,585	13,691	13,798	13,905	14,014	14,123	14,233	14,344	14,456	14,569	14,683	14,797	14,913	15,029	15,146	15,264
% of frontline elderly CLL patients treated in the 1st-line setting	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*
# of frontline elderly CLL patients treated in the 1st-line setting	8,762	8,830	8,899	8,969	9,038	9,109	9,180	9,252	9,324	9,397	9,470	9,544	9,618	9,693	9,769	9,845	9,922
TG-1303 penetration in elderly 1st-line setting	*0%*	*0%*	*0%*	*8%*	*12%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*	*20%*	*15%*	*15%*	*15%*
# of elderly 1st-line CLL patients treated with TG-1303	**-**	**-**	**-**	**717**	**1,085**	**1,822**	**1,836**	**1,850**	**1,865**	**1,879**	**1,894**	**1,909**	**1,924**	**1,939**	**1,465**	**1,477**	**1,488**
Duration of treatment (months)				**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Months of treatment in the year of diagnosis				12	12	12	12	12	12	12	12	12	12	12	12	12	12
Months of treatment in year 2 of diagnosis				4	4	4	4	4	4	4	4	4	4	4	4	4	4
Cost of treatment/month				$8,000	$8,240	$8,487	$8,742	$9,004	$9,274	$9,552	$9,839	$10,134	$10,438	$10,751	$11,074	$11,406	$11,748
Compliance, including gross to net adjustments				*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
TG-1303 sales in elderly CLL patients in year 1 of diagnosis				$59	$91	$158	$164	$170	$176	$183	$190	$197	$205	$213	$166	$172	$178
TG-1303 sales in elderly CLL patients in year 2 of diagnosis				$0	$20	$31	$54	$56	$58	$61	$63	$65	$68	$70	$73	$57	$59
Total TG-1303 sales in 1st-line CLL setting *(elderly)*	**$0**	**$0**	**$0**	**$60**	**$110**	**$190**	**$220**	**$225**	**$235**	**$245**	**$255**	**$265**	**$275**	**$285**	**$240**	**$230**	**$235**

RR CLL patients	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
CLL incidence	19,257	19,407	19,559	19,711	19,865	20,020	20,176	20,333	20,492	20,652	20,813	20,975	21,139	21,304	21,470	21,637	21,806
% of CLL patients that are treated in the 1st-line setting	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*	*65%*
# of CLL patients that are treated in the 1st-line setting	12,517	12,615	12,713	12,812	12,912	13,013	13,114	13,217	13,320	13,424	13,528	13,634	13,740	13,847	13,955	14,064	14,174
% of R/R CLL patients	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*
# of R/R CLL patients	11,265	11,353	11,442	11,531	11,621	11,712	11,803	11,895	11,988	12,081	12,175	12,270	12,366	12,463	12,560	12,658	12,757
% of r/r patients that are treated in the 2nd-line setting	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*	*80%*
# of r/r patients that are treated in the 2nd-line setting	9,012	9,083	9,153	9,225	9,297	9,369	9,442	9,516	9,590	9,665	9,740	9,816	9,893	9,970	10,048	10,126	10,205
TGR-1303 penetration in RR CLL				*5%*	*10%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*12%*	*10%*	*10%*
# of patients treated with TG-1303		**-**	**-**	**461**	**930**	**1,405**	**1,416**	**1,427**	**1,439**	**1,450**	**1,461**	**1,472**	**1,484**	**1,496**	**1,206**	**1,013**	**1,021**
Duration of treatment (months)				*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*	*12*
Cost of treatment/month				$8,000	$8,240	$8,487	$8,742	$9,004	$9,274	$9,552	$9,839	$10,134	$10,438	$10,751	$11,074	$11,406	$11,748
Compliance, including gross to net adjustments				*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
Total TG-1303 Sales In RR CLL	**$0**	**$0**	**$0**	**$40**	**$80**	**$120**	**$125**	**$130**	**$135**	**$140**	**$145**	**$150**	**$160**	**$165**	**$135**	**$120**	**$120**
Total TG-1303 Sales (Frontline + RR CLL)	**$0**	**$0**	**$0**	**$100**	**$190**	**$310**	**$345**	**$355**	**$370**	**$385**	**$400**	**$415**	**$435**	**$450**	**$375**	**$350**	**$355**
Total ROW TG-1303 Sales In (Frontline + RR CLL) ($MM)	**$0**	**$0**	**$0**	**$30**	**$105**	**$185**	**$205**	**$215**	**$220**	**$230**	**$240**	**$250**	**$260**	**$270**	**$190**	**$160**	**$125**
% U.S. sales				*30%*	*55%*	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*	*50%*	*45%*	*35%*
Total WW TG-1303 Sales (Frontline + RR CLL) ($MM)	**$0**	**$0**	**$0**	**$130**	**$295**	**$495**	**$550**	**$570**	**$590**	**$615**	**$640**	**$665**	**$695**	**$720**	**$565**	**$510**	**$480**

Source: STRH Research, Company reports. Last updated: 5/26/2016

TG-1303 NPV — CLL ($MM)

TG-1303 NPV In CLL - ($MM)	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
TG-1303 Sales in CLL - U.S.			-	-	-	100	190	310	345	355	370	385	400	415	435	450	375	350	355
YoY (%)							*90%*	*63%*	*11%*	*3%*	*4%*	*4%*	*4%*	*4%*	*5%*	*3%*	*-17%*	*-7%*	*1%*
TG-1303 Sales in CLL - E.U.			-	-	-	30	105	185	205	215	220	230	240	250	260	270	190	160	125
YoY (%)							*250%*	*76%*	*11%*	*5%*	*2%*	*5%*	*4%*	*4%*	*4%*	*4%*	*-30%*	*-16%*	*-22%*
Total Revenue	0	0	0	0	0	130	295	495	550	570	590	615	640	665	695	720	565	510	480
COGS	-	-	-	-	-	20	44	74	83	86	89	92	96	100	104	108	85	77	72
% of Total Revenues (includes royalties to third party)						*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
R&D	20	33	38	43	48	5	2	2	2	2	2	2	2	2	2	2	2	2	2
% of Revenues						*4%*	*1%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
SG&A	3	5	15	23	44	60	65	65	65	65	65	65	65	65	65	65	65	65	65
% of Revenues						*46%*	*22%*	*13%*	*12%*	*11%*	*11%*	*11%*	*10%*	*10%*	*9%*	*9%*	*12%*	*13%*	*14%*
Operating Income	(23)	(38)	(53)	(65)	(92)	46	184	354	401	418	435	456	477	498	524	545	413	367	341
Operating Margin						*35%*	*62%*	*71%*	*73%*	*73%*	*74%*	*74%*	*75%*	*75%*	*75%*	*76%*	*73%*	*72%*	*71%*
Tax	-	-	-	-	-	2	15	35	60	84	109	114	119	125	131	136	103	92	85
Tax rate					*0%*	*5%*	*8%*	*10%*	*15%*	*20%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*
NPV Of Free Cash Flow	(23)	(38)	(53)	(65)	(92)	43	169	318	340	334	326	342	358	374	393	409	310	275	256
Years	0.60	1.57	2.55	3.53	4.50	5.48	6.45	7.43	8.40	9.38	10.35	11.33	12.30	13.28	14.25	15.23	16.21	17.18	18.16
Discount Factor	0.94	0.86	0.78	0.71	0.65	0.59	0.54	0.49	0.45	0.41	0.37	0.34	0.31	0.28	0.26	0.23	0.21	0.19	0.18
NPV of Cash Flows	(22)	(33)	(41)	(46)	(60)	26	91	157	153	137	121	116	111	105	101	96	66	53	45

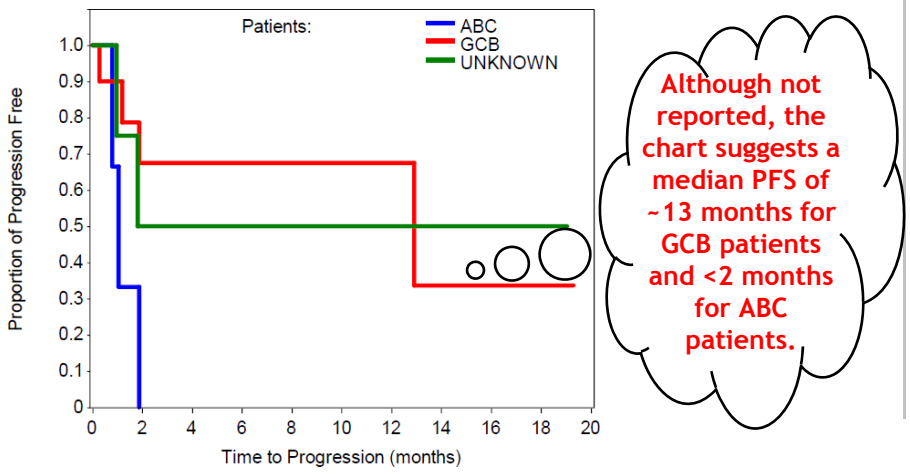
Discount rate	10%
Perpetual Growth Rate	0%
Present Value of Terminal Value	0
Present Value of Cash Flows	1,182
NPV Per Share	$21
Probability of success	60%
Probability-adjusted NPV/share	$13
Fully Diluted Shares Outstanding	56

Source: STRH Research, Company reports. Last updated: 5/26/2016

TG-1303: *Expansion Into DLBCL Could Represent ~$200MM Opportunity*

TG-1303's Phase I Data In R/R DLBCL Shows Overall Efficacy In-Line With Novel Single-Agent Therapies... Recall that at 2015 ASH, Lunning et al. (link to poster) presented Phase I data on TG-1303 showing an overall ORR of 31% in 16 R/R DLBCL patients, which is in the range of several novel *single*-agent therapies currently in development including obinutuzumab (~32% ORR), lenalidomide (~28%), ibrutinib (~22%), everolimus (~30%), and temsirolimus (28%), though below blinatumomab (43%) and pidilizumab (51%).

...Notably Showing Activity In GCB And Unknown Subtype Patients, But Not In The ABC Subtype. Subgroup analysis showed activity in patients with GCB (ORR 33% or 3/9) and unknown subtypes (ORR 50% or 2/4), but not in the ABC (ORR 0% or 0/3) subtype (see chart below for details), in contrast to lenalidomide and ibrutinib, which showed marked activity (~37-45%) in patients with the ABC subtype but less so (~5-21%) in GCB patients.



Although not reported, the chart suggests a median PFS of ~13 months for GCB patients and <2 months for ABC patients.

Source: STRH Research, Company Reports

Though Not In Our Model, The Phase IIb Unity-DLBCL Study Could Support... In 2Q16, we expect TGTX to initiate the Phase IIb Unity-DLBCL trial to evaluate TG-1303 in patients with R/R DLBCL. We have not included this indication in our model given the limited and early nature of the data, but we believe the compound could be promising particularly for patients with the GCB subtype. Based on response rates seen with other novel agents, we believe an ORR in the range of 30% with a median PFS of ~12 months would be encouraging. Early data from this trial are likely in late 2017/early 2018.

...A R/R DLBCL Opportunity Worth >$200MM Annually. The incidence of DLBCL in the U.S. is ~7/100,000 or ~22,300 persons per year, while in the EU, the incidence is ~4.92/100,000 or ~25,000 persons per year (~12% higher than the U.S.). Assuming the TG-1303 activity is limited to **(1)** the ~55% of patients with GCB and unclassified subtypes and **(2)** the ~45% of these patients who fail frontline therapy, then the eligible R/R DLBCL population in the U.S. and E.U. are ~5,500 and ~6,200, respectively, or ~11,700 worldwide. Based on a modest penetration of 20% and an annual cost of ~$100,000, we believe TG-1303 could achieve >$200MM in peak sales if successful in this indication.

TG-1101: *Multiple Sclerosis Opportunity Could Add Substantial Upside*

TG-1101 Is In Phase II Development For Multiple Sclerosis… Multiple anti-CD20 antibodies (rituximab, ocrelizumab, ofatumumab) have shown efficacy in multiple sclerosis, and the company believes that TG-1101's advantage could lie in its ability to compete on **(1)** shorter infusion times (450mg or 600mg in <1 hour vs. 3-4 hours for ocrelizumab), **(2)** price, and **(3)** improved side effect profile from lower dosing. We expect initial Phase II data on B-cell depletion by YE16, and per management, the bar for success will be a 99% reduction in B-cell levels with the majority of patients having undetectable levels (similar to data seen in the ocrelizumab trials).

…However Safety Concerns And The Crowded Competition Could Limit Upside. While anti-CD20 agents have shown impressive efficacy, they are also associated with increased PML risk which has been a key factor preventing wider adoption in MS. We believe TG-1101 must show a relatively clean safety profile in MS similar to ocrelizumab in order to drive uptake. In addition to anti-CD20 safety issues, the MS space is very competitive with multiple novel agents (see below) in mid-late stage development.

Given The Early Nature Of Clinical Development, We Have Assigned No Value To The MS Indication In Our Model. Nonetheless, a successful program taking even a ~5% share of the sizeable MS market (400,000 U.S. and 700,000 EU patients) at competitive pricing could represent a potential blockbuster opportunity. Please see MS model and NPV later in the report.

Select Novel Multiple Sclerosis Therapeutics

Drug	Mechanism	Company	Phase	Compound	Delivery
Zinbryta (daclizumab)	CD25	Biogen (BIIB, $283.08, NR)	BLA	Monoclonal Antibody	SubQ
Ozanimod (RPC1063)	S1PR	Celgene	III	Small Molecule	Oral
ALKS 8700 (monomethyl fumarate)	HCAR2	Alkermes	III	Small Molecule	Oral
Siponimod	S1PR	Novartis	III	Small Molecule	Oral
MD-1003	Acetyl-CoA carboxylase (ACAC)	MedDay Pharma (private, NR)	III	Small Molecule	Oral
Nerventra (laquinimod)	Immune system	Teva (TEVA, $51.33, NR)	III	Small Molecule	Oral
Ocrevus (ocrelizumab)	CD20	Roche	III	Monoclonal Antibody	IV
Ponesimod	S1PR	Actelion Pharma (ALIOY, $40.79, NR)	III	Small Molecule	Oral
MN-166 (ibudilast)	PDE3/4	MediciNova (MNOV, $6.63, NR)	II	Small Molecule	Oral
Tcelna (imilecleucel-T)	Immune system	Opexa Therapeutics (OPXA, $3.09, NR)	II	Cellular	SubQ
Amiselimod (MT-1303)	S1PR	Biogen	II	Small Molecule	Oral
Arzerra (ofatumumab)	CD20	Novartis	II	Monoclonal Antibody	SubQ
M2736 (ATX-MS-1467)	Immune system	Merck KGaA	II	Peptide Vaccine	Intradermal
Opicinumab (BIIB-033)	LINGO-1	Biogen	II	Monoclonal Antibody	IV

Source: STRH Research, BioMedTracker, Company Websites

TG-1101 Revenue Model — MS ($MM)

TG-1101: Multiple Sclerosis Revenue Build	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
US population (MM)	334	337	339	342	344	347	350	352	355	358	361	363	366	369
Total MS patients ('000)	300	300	300	300	300	300	300	300	300	300	300	300	300	300
MS Incidence (Per Thousand)	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.84	0.83	0.83	0.82	0.81
% of patients with relapsing/remitting MS (RRMS)	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*
# of patients with relapsing/remitting MS (RRMS)	255	255	255	255	255	255	255	255	255	255	255	255	255	255
% of patients with primary progressive MS (PPMS)	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
# of patients with primary progressive MS (PPMS)	30	30	30	30	30	30	30	30	30	30	30	30	30	30
% of patients with benign MS	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
# of patients with benign MS	15	15	15	15	15	15	15	15	15	15	15	15	15	15
TG-1101 penetration in RRMS patients	*0.6%*	*1.0%*	*1.8%*	*2.5%*	*3.5%*	*4.5%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
# of RRMS patients treated with RPC1063	2	3	5	6	9	11	13	13	13	13	13	13	13	13
Price Per Patient/Per year	47,271	48,690	50,150	51,655	53,204	54,800	56,444	58,138	59,882	61,678	63,529	65,435	67,398	69,420
Compliance, including gross to net adjustments	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
U.S. Sales ($MM)	**$60**	**$105**	**$195**	**$280**	**$405**	**$535**	**$610**	**$630**	**$650**	**$670**	**$690**	**$710**	**$730**	**$750**
Total ROW Sales ($MM)	**$10**	**$30**	**$70**	**$140**	**$200**	**$270**	**$310**	**$320**	**$330**	**$340**	**$350**	**$320**	**$260**	**$230**
% of U.S. sales	*20%*	*30%*	*35%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*45%*	*35%*	*30%*
Total WW Sales ($MM)	**$70**	**$135**	**$265**	**$420**	**$605**	**$805**	**$920**	**$950**	**$980**	**$1,010**	**$1,040**	**$1,030**	**$990**	**$980**

Source: STRH Research, Company reports. Last updated: 5/26/2016

TG-1101 NPV — MS ($MM; Not Part Of Our Valuation)

TG-1101 NPV In MS - ($MM)	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
TGR-1101 Sales In MS - U.S.	-	-	-	-	-	60	105	195	280	405	535	610	630	650	670	690	710	730	750
YoY (%)							*75%*	*86%*	*44%*	*45%*	*32%*	*14%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
TGR-1101 Sales In MS - ROW	-	-	-	-	-	10	30	70	140	200	270	310	320	330	340	350	320	260	230
YoY (%)							*200%*	*133%*	*100%*	*43%*	*35%*	*15%*	*3%*	*3%*	*3%*	*3%*	*-9%*	*-19%*	*-12%*
Total Revenue	0	0	0	0	0	70	135	265	420	605	805	920	950	980	1,010	1,040	1,030	990	980
COGS	-	-	-	-	-	11	20	40	63	91	121	138	143	147	152	156	155	149	147
% of Total Revenues (includes royalties to third party)						*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
R&D	5	25	50	50	50	20	10	5	5	5	2	2	2	2	2	2	2	2	2
% of Revenues						*29%*	*7%*	*2%*	*1%*	*1%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
SG&A	5	15	20	20	30	75	100	125	150	165	170	175	180	186	191	197	203	209	215
% of Revenues				*65%*	*125%*	*60%*	*35%*	*25%*	*24%*	*23%*	*22%*	*21%*	*20%*	*19%*	*18%*	*17%*	*16%*	*15%*	*15%*
Operating Income	(10)	(40)	(70)	(70)	(80)	(36)	5	95	202	344	512	605	625	645	665	685	671	630	616
Operating Margin								*36%*	*48%*	*57%*	*64%*	*66%*	*66%*	*66%*	*66%*	*66%*	*65%*	*64%*	*63%*
Tax	-	-	-	-	(4)	(4)	1	19	44	86	128	151	156	161	166	171	168	158	154
Tax rate					*5%*	*10%*	*15%*	*20%*	*22%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*	*25%*
NPV Of Free Cash Flow	(10)	(40)	(70)	(70)	(76)	(32)	4	76	158	258	384	454	469	484	499	514	503	473	462
Years	0.60	1.57	2.55	3.53	4.50	5.48	6.45	7.43	8.40	9.38	10.35	11.33	12.30	13.28	14.25	15.23	16.21	17.18	18.16
Discount Factor	0.94	0.86	0.78	0.71	0.65	0.59	0.54	0.49	0.45	0.41	0.37	0.34	0.31	0.28	0.26	0.23	0.21	0.19	0.18
NPV of Cash Flows	(9)	(34)	(55)	(50)	(49)	(19)	2	38	71	106	143	154	145	137	128	120	107	92	82

Discount rate	10%
Perpetual Growth Rate	0%
Present Value of Terminal Value	0
Present Value of Cash Flows	1,110
NPV Per Share	$20
Fully Diluted Shares Outstanding	56

Source: STRH Research, Company reports. Last updated: 5/26/2016

Appendix: *What Is Chronic Lymphocytic Leukemia (CLL)?*

- **Introduction:** Chronic lymphocytic leukemia (CLL) is a relatively slow-growing type of leukemia characterized by the progressive accumulation of mature clonal B lymphocytes in the blood, bone marrow and other lymphoid tissues.
- **Epidemiology:** CLL is the most common leukemia in North America and Western Europe, accounting for ~40% of all adult leukemias, with an incidence rate of 4.2/100,000. According to the American Cancer Society, there will be an estimated ~18,960 new cases of CLL in the U.S. The median age at diagnosis is ~70 years of age with 70% of patients diagnosed over the age of 65.
- **Diagnosis:** Diagnosis of CLL is based on an absolute B lymphocyte count ≥5,000/μL lasting more than three months, and the clonality of the B lymphocytes must be confirmed by flow cytometry showing κ or λ light chains. Immunohistochemistry is likely to show a majority of cells with surface markers CD5, CD19, CD20(dim), and CD23. A blood smear typically shows morphologically mature-appearing small lymphocytes.
- **Staging and Prognosis:** There are two standardized ways to stage CLL: **(1)** Rai system (more common in U.S.) and **(2)** Binet system (more common in EU). FISH analysis is important for prognosis with del(13q) patients having a good prognosis and del(11q) and del(17p) having poor prognosis. The median survival for CLL patients is variable with many patients surviving 6+ years and some patients >10 years, though patients with high-risk cytogenetics may have shorter life expectancies.
- **Treatment Paradigm (highly complex and evolving):** In early disease (e.g., RAI score ≤2 or Binet score of A or B), oftentimes no treatment is indicated for patients. When patients require therapy, the treatment paradigm is dependent on the patient's age, functional status, cytogenetics and prior therapy. In treament naïve younger patients (age <70) without significant comorbidities and normal cytogenetics, FCR (fludarabine, cyclophosphamide, rituximab) is the standard regimen while frontline options for older patients and/or patients with significant comorbidities include **(1)** obinituzumab + chlorambucil, **(2)** ibrutinib, or **(3)** other regimens. In comparison, for patients with high-risk cytogenetics (e.g., del(17p) or TP53 mutations), ibrutinib is the preferred agent. With the possible exception of allogeneic hematopoietic cell transplant, no cure is available for CLL. See detail list of currently approved CLL treatment regimens on next page.

Appendix: *CLL Treatment Regimen Details*

	High-Risk Cytogenetics			Regular Cytogenetics	
	del(17p)/TP53 mutation	del(11q)			
	Fit or Unfit	**Fit**	**Unfit**	**Fit**	**Unfit**
Frontline CLL	• Ibrutinib • HDMP + rituximab • FCR • FR • Obinutuzumab + chlorambucil • Alemtuzumab ± rituximab	• FCR • Bendamustine ± rituximab • PCR • Obinutuzumab + chlorambucil	• Obinutuzumab + chlorambucil • Ibrutinib • Ofatumumab + chlorambucil • Rituximab + chlorambucil • Bendamustine ± rituximab • Cyclophosphamide, prednisone ± rituximab • Reduced-dose FCR • Chlorambucil • Rituximab	• FCR • FR • PCR • Bendamustine ± rituximab	• Obinutuzumab + chlorambucil • Ibrutinib • Ofatumumab + chlorambucil • Rituximab + chlorambucil • Bendamustine (avoid in frail pts) • Obinutuzumab • Fludarabine ± rituximab (avoid in frail pts) • Chlorambucil (after rituximab monotherapy in frail pts) • Rituximab • Pulse corticosteroids (frail pts only)
	Fit or Unfit	**Fit**	**Unfit**	**Fit**	**Unfit**
Relapsed/ refractory CLL	• Ibrutinib • Venetoclax • Idelalisib + rituximab • Idelalisib • HDMP + rituximab • Lenalidomide ± rituximab • Alemtuzumab ± rituximab • Ofatumumab • OFAR	• Ibrutinib • Idelalisib + rituximab • Idelalisib • FCR • PCR • Benamustine ± rituximab • Fludarabine + alemtuzumab • OFAR • Ofatumumab • Obinutuzumab • Lenalidomide ± rituximab • Alemtuzumab ± rituximab • HDMP + rituximab	• Ibrutinib • Idelalisib + rituximab • Idelalisib • Bendamustine ± rituximab • Reduced-dose FCR • Reduced-dose PCR • HDMP + rituximab • Rituximab + chlorambucil • Ofatumumab • Obinutuzumab • Lenalidomide ± rituximab • Alemtuzumab ± rituximab • Dose-dense rituximab	• Ibrutinib • Idelalisib + rituximab • Idelalisib • FCR • PCR • Bendamustine ± rituximab • Fludarabine + alemtuzumab • RCHOP • OFAR • Ofatumumab • Obinutuzumab • Lenalidomide ± rituximab • Alemtuzumab ± rituximab • HDMP + rituximab	• Ibrutinib • Idelalisib + rituximab • Idelalisib • Bendamustine ± rituximab • Reduced-dose FCR • Reduced-dose PCR • HDMP + rituximab • Rituximab + chlorambucil • Ofatumumab • Obinutuzumab • Lenalidomide ± rituximab • Alemtuzumab ± rituximab • Dose-dense rituximab

Source: STRH Research, NCCN Guidelines For Non-Hodgkin Lymphomas (Version 3.2016).

Appendix: *What Is Diffuse Large B-Cell Lymphoma (DLBCL)?*

- **Introduction:** Diffuse large B-cell lymphoma (DLBCL), a heterogeneous group of tumors, is an aggressive form of non-Hodgkin lymphoma arising from mature B cells broadly categorized into two broad subgroups: **(1)** Germinal Center B-cell-like (GCB subtype) and **(2)** Activated B-cell-like (ABC subtype).
- **Epidemiology:** DLBCL is the most common aggressive form of non-Hodgkin lymphoma (NHL) accounting for ~25-30% of NHL cases with an incidence of ~7/100,000 in the U.S. (22,000 patients) and ~5/100,000 in EU (25,000 patients). The median age at diagnosis is ~64 years.
- **Diagnosis:** Excisional tissue (usually lymph node) biopsy is typically used for diagnosis, which is made on morphology (large cells resembling centroblasts and immunoblasts) and immunophenotyping.
- **Prognosis:** In contrast to CLL, many patients (~50-60%) with DLBCL can be cured with frontline therapy; however, the prognosis for refractory and early relapsed patients is poor. Patients with the ABC subtype typically have poorer outcomes compared to GCB subtype patients, though some novel agents in development (ibrutinib, lenalidomide) have shown promising and preferential activity in the ABC subtype.
- **Treatment Paradigm:** The majority of patients are likely to receive some combination of rituximab + chemotherapy (e.g., RCHOP) as frontline therapy, and the specific regimen can be tailored depending on function and/or comorbidities (see chart below for details.)

First-line Therapy	First-line Consolidation (optional)	Second-Line Therapy (candidates for HDT/ASCT)	Second-Line Therapy (non-candidates for HDT/ASCT)
• RCHOP • Dose-dense RCHOP 14 • Dose-adjusted EPOCH + rituximab *If Poor LV Function or Frail* • RCEPP • *RCDOP* • Dose-adjusted-EPOCH + rituximab • RCEOP • RGCVP • R-mini-CHOP	• HDT/ASCT (consider in select patients)	• DHAP ± rituximab • ESHAP ± rituximab • GDP ± rituximab • GemOx ± rituximab • ICE ± rituximab • MINE ± rituximab	• Bendamustine ± rituximab • Brentuximab vedotin (CD30+ disease) • CEPP ± rituximab • CEOP ± rituximab • Dose-adjusted-EPOCH ± rituximab • GDP ± rituximab • GemOx ± rituximab • Lenalidomide ± rituximab (non-GCB DLBCL) • Rituximab

Source: STRH Research, NCCN Guidelines For Non-Hodgkin Lymphomas (Version 3.2016).

Appendix: *What is Follicular Lymphoma (FL)?*

- **Introduction:** Follicular lymphoma (FL) is the most common indolent (slow-growing) form of non-Hodgkin lymphoma, derived from germinal center B cells.
- **Epidemiology:** FL accounts for ~15-20% of NHL cases with an incidence of 2-3/100,000 in the U.S. (10-15K) and EU (15-20K). The median age at diagnosis is ~65 years of age.
- **Diagnosis:** An excisional lymph node biopsy is typically sufficient for diagnosis, based on the FL's distinctive nodular appearance of centrocytes and centroblasts, although immunophenotyping by flow cytometry can be helpful.
- **Prognosis:** The prognosis for follicular lymphoma can be variable depending on factors including the patient's age, stage, performance status, and extranodal disease status. With the introduction of new therapies, the median survival has improved to ~14 years.
- **Treatment Paradigm:** The majority of patients are likely to receive some combination of rituximab + chemotherapy (e.g., bendamustine + rituximab) as frontline therapy, and the specific regimen can be tailored depending on function and/or comorbidities (see chart below for details.)

First-line Therapy	First-line Consolidation or Extended Dosing (optional)	Second-Line Therapy	Second-line Consolidation or Extended Dosing
• Bendamustine + rituximab • RCHOP • RCVP • Rituximab • Lenalidomide + rituximab *If Elderly Or Infirm* • Rituximab • Single-agent alkylators ± rituximab • Radioimmunotherapy	• Rituximab Q8W x12 (high tumor burden) • Rituximab Q8W x4 (rituximab initial tx) • Radioimmunotherapy	• Chemoimmunotherapy (as in first-line) • Rituximab • Lenalidomide ± rituximab • Radioimmunotherapy • Idelalisib • Fludarabine + rituximab • RFND • Second-line DLBCL agents	• Rituximab Q12W for 2 years (optional) • HDT/ASCT • Allogeneic SCT (select pts) • Obinutuzumab (rituximab-refractory)

Source: STRH Research, NCCN Guidelines For Non-Hodgkin Lymphomas (Version 3.2016).

Management Compensation Structure In-Line With Shareholder Interests

Name/Title	2013	2014	2015
Michael S. Weiss/Interim CEO and President	**$ 2,409,054**	**$ 4,705,683**	**$ 13,968,897**
Salary	250,000	262,500	325,000
Stock and Option Awards	1,884,054	4,233,183	13,440,772
Other	275,000	210,000	203,125
Sean A. Power/CFO, Treasurer, and Corporate Secretary	**$ 532,250**	**$ 387,600**	**$ 867,906**
Salary	160,000	180,000	225,000
Stock and Option Awards	287,250	157,600	596,500
Other	85,000	50,000	46,406

Source: STRH research, SEC Filings

- **Management Compensation Aligns With Shareholders' Interests**

  TG Therapeutics' overall compensation plan appears to be in-line with shareholders' interests. Named executive officer compensation consists of base salary, annual cash incentives awards, long-term equity incentive awards, and severance benefits.

- **Bonus Based Upon Performance And Corporate Goals**

  The bonus plan is based on performance and the achievement of corporate goals established by the Board of Directors. The corporate goals were related to multiple criteria including various clinical and pre-clinical goals, various goals related to manufacturing, non-clinical and regulatory, and various goals related to business development operations.

- **Interim CEO and President – Michael S. Weiss:** Mr. Weiss has served as TG Therapeutics' Executive Chairman, Interim CEO and President since December 2011. Mr. Weiss is a co-founder of, and has been a managing partner and principal of Opus Point Partners since 2009. Prior to TG Therapeutics, Mr. Weiss served as CEO of Keryx Biopharmaceuticals and founded Access Oncology, which was acquired by Keryx in 2004. Mr. Weiss holds a J.D. from Columbia Law School and a B.S. in Finance from The University at Albany.

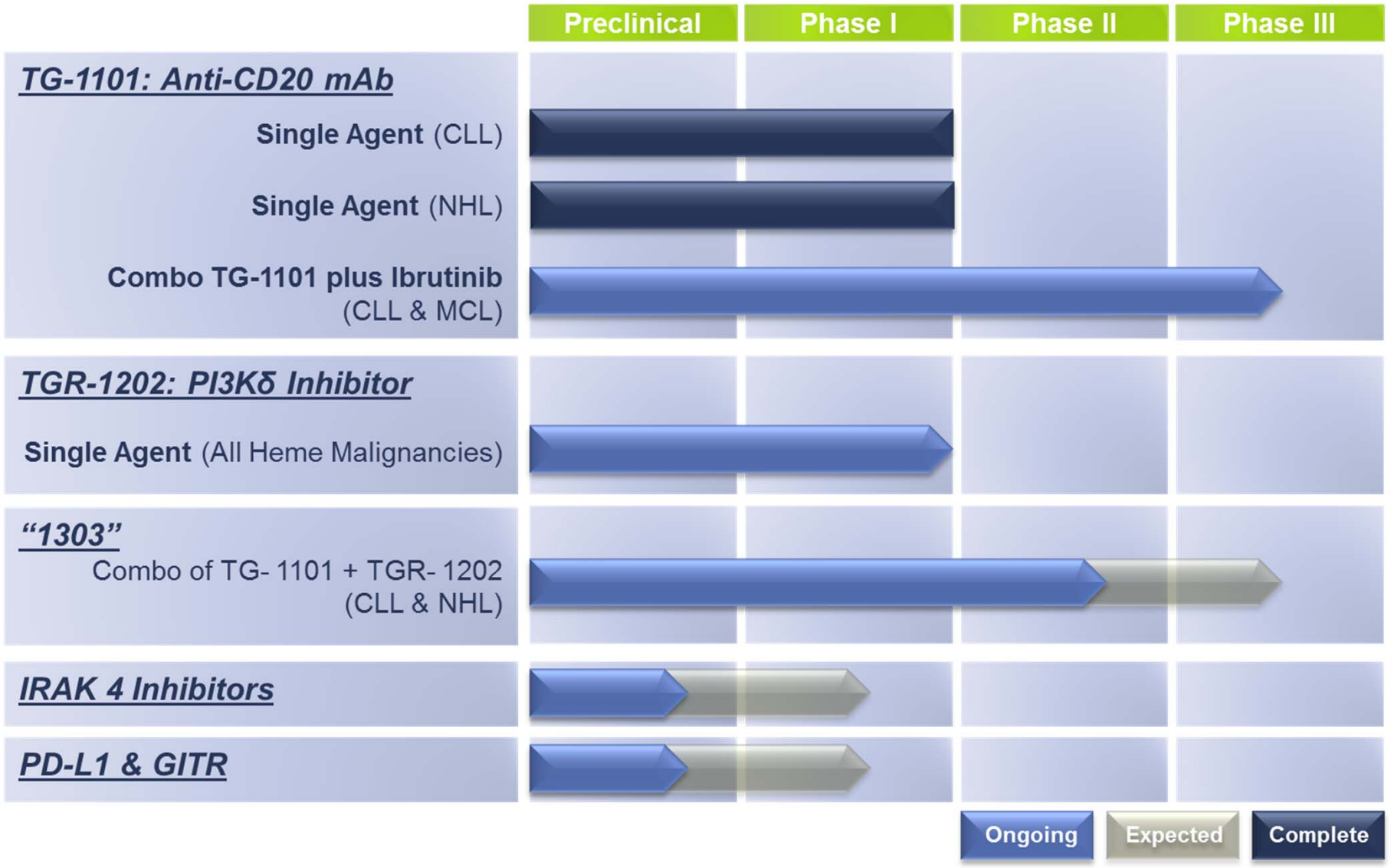
- **CFO, Treasurer, And Corporate Secretary – Sean A. Power:** Mr. Power has served as CFO of TG Therapeutics since December 2011 and also serves as CFO of Opus Point Partners. Prior to TG therapeutics, Mr. Power was a Corporate Controller at Keryx Biopharmaceuticals from 2006 to 2011 where he was involved in capital raising and licensing transactions. Prior to Keryx, Mr. Power was a senior associate at KPMG, LLP. Mr. Power holds a B.B.A. in accounting from Siena College and is a member of the American Institute of Certified Public Accountants.

Top Investors And Institutional Holders

#	Institutions	%OS	Position (000)	Pos Chg (000) [6M]	Mkt Val (MM)
1	Fidelity Management & Research Co.	11.1%	6,025	62	$47
2	RA Capital Management LLC	5.5%	4,532	1,407	$35
3	Opus Point Partners Management LLC	4.9%	4,525	0	$35
4	Bridger Management LLC	4.7%	3,345	190	$26
5	Baker Bros. Advisors LP	4.3%	2,004	0	$16
6	BlackRock Fund Advisors	4.1%	1,908	108	$15
7	Sectoral Asset Management, Inc.	4.1%	1,522	58	$12
8	UBS AG (Investment Management)	3.0%	1,352	1,352	$11
9	The Vanguard Group, Inc.	2.2%	1,331	109	$10
10	SSgA Funds Management, Inc.	2.0%	1,181	(1,454)	$9
11	Columbus Circle Investors	1.9%	613	(48)	$5
12	Eventide Asset Management LLC	1.8%	538	162	$4
13	Visium Asset Management LP	1.0%	525	25	$4
14	UBS Asset Management (Americas) Inc.	1.0%	508	352	$4
15	Northern Trust Investments, Inc.	0.9%	447	21	$3

Source: STRH research, FactSet. Last updated: 5/26/2016

TGTX R&D Pipeline



Source: Company Presentation

TGTX Investment Risks

Clinical And/Or Regulatory Risk

- TG Therapeutics is a clinical-stage biotech which has significant investment risks. Given the lack of marketed products, TGTX's success is highly contingent on TG-1101 and TGR-1202's **(1)** successful completion of clinical development and **(2)** approval by the FDA, EMA, and other regulatory authorities. Any setbacks in clinical development or regulatory approval could have a significant negative impact on the stock price of the company.

Partner Risk

- TG Therapeutics does not have full internal development capabilities and relies primarily on third parties for preclinical/clinical development and wholly on third parties for the manufacturing of product candidates.

Competition Risk

- TG Therapeutics' business is largely dependent on the potential commercial success of its TG-1101 and TGR-1202 programs, which could face intense competition from **(1)** both current and emerging therapeutic products/classes and **(2)** unexpected adverse events, hampering uptake among physicians and patients. Many of the potential competitors in targeted indications (CLL, NHL, and MS) have substantially greater R&D resources, regulatory experience, and capital.

Intellectual Property Risk

- TG Therapeutics' commercial success depends on its ability to obtain and secure IP protection for its product candidates and core technologies. If the company is unable to maintain adequate patent protection for key products including **(1)** TG-1101 and **(2)** TGR-1202, the duration of commercial exclusivity for these products could be significantly reduced.

Reimbursement/Pricing Pressure

- Biotech drug-pricing strategy has recently come under increased scrutiny by lawmakers. So far, biotech companies have been able to set high prices for their products, but this ability could be moderated going forward.

TGTX P&L ($MM)

TGTX: P&L ($MM)	FY 2014A	Mar Q1:15A	Jun Q2:15A	Sep Q3:15A	Dec Q4:15A	FY 2015A	Mar Q1:16A	Jun Q2:16E	Sep Q3:16E	Dec Q4:16E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2021E
Total TG-1101 Sales (risk adjusted)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	20.0	40.0	60.0
% change YoY														*400%*	*100%*	*50%*
Total TG-1303 Sales (risk adjusted)	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	78.0
% change YoY																
Total Product Sales	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**20.0**	**40.0**	**138.0**
License revenue	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total revenue	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**4.0**	**20.0**	**40.0**	**138.0**
COGS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.2	6.0	20.7
Gross margin													*83%*	*84%*	*85%*	*85%*
R&D	40.1	9.6	11.3	11.6	15.3	47.7	11.6	12.2	12.8	13.4	50.0	65.0	75.0	85.0	95.0	100.0
SG&A	15.8	5.0	5.9	2.3	2.4	15.6	2.4	2.6	2.8	3.0	10.8	18.0	50.0	75.0	110.0	120.0
Total Operating expenses	**55.9**	**14.6**	**17.1**	**13.9**	**17.7**	**63.3**	**14.0**	**14.8**	**15.6**	**16.4**	**60.8**	**83.0**	**125.7**	**163.2**	**211.0**	**240.7**
Operating Income/Loss	**(55.7)**	**(14.6)**	**(17.1)**	**(13.8)**	**(17.6)**	**(63.2)**	**(14.0)**	**(14.8)**	**(15.6)**	**(16.4)**	**(60.7)**	**(83.0)**	**(121.7)**	**(143.2)**	**(171.0)**	**(102.7)**
OpEx Margins																
Other (income) expenses, net	0.1	(0.0)	(0.0)	(0.2)	(0.0)	(0.2)	0.1	0.1	0.1	0.1	0.4	0.3	0.0	0.0	0.0	0.0
Pretax income	(55.8)	(14.6)	(17.1)	(13.7)	(17.6)	(62.9)	(13.8)	(14.7)	(15.5)	(16.3)	(60.2)	(82.7)	(121.7)	(143.2)	(171.0)	(102.7)
Income tax expense	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
Tax rate	*0%*					*0%*					*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
GAAP Net Income	**(55.8)**	**(14.6)**	**(17.1)**	**(13.7)**	**(17.6)**	**(62.9)**	**(13.8)**	**(14.7)**	**(15.5)**	**(16.3)**	**(60.2)**	**(82.7)**	**(121.7)**	**(143.2)**	**(171.0)**	**(102.7)**
GAAP EPS	**($1.64)**	**($0.35)**	**($0.38)**	**($0.28)**	**($0.37)**	**($1.38)**	**($0.28)**	**($0.30)**	**($0.31)**	**($0.32)**	**($1.20)**	**($1.35)**	**($1.75)**	**($1.80)**	**($2.00)**	**($1.10)**
Diluted Shares Outstanding (MM)	34.1	41.1	45.3	47.9	48.1	45.6	48.9	49.5	50.4	51.4	50.1	61.4	69.5	79.5	85.5	93.0

Source: STRH analysis and Company reports

Cash ($MM)	*$102*	*$85*	*$72*	*$58*	*$44*	*$44*	*$103*	*$139*
Cash/share	*$2.1*	*$1.7*						
Burn ($MM)		*($17)*	*($13)*	*($14)*	*($15)*	*($59)*	*($76)*	*($114)*
Capital raise ($MM)							*$135*	*$150*

Last updated: 5/26/2016

Company Description

TG Therapeutics is a clinical stage biotech focused on acquiring, developing and commercializing novel compounds for B-cell mediated diseases including **(1)** chronic lymphocytic leukemia, **(2)** non-Hodgkin lymphoma, and **(3)** multiple sclerosis. The company's stated objective is to build a portfolio of assets for the development of novel combination (doublet, triplet, or quad) therapies at a favorable price to competitors. TGTX has in-licensed two compounds currently in clinical development: **(1)** TG-1101, a novel anti-CD20 monoclonal antibody and **(2)** TGR-1202, a PI3K-delta inhibitor, which it hopes to leverage as backbone therapy in B-cell malignancies and autoimmune diseases. In addition, the company also has pre-clinical programs to develop IRAK4 inhibitors and anti-PD-L1 and anti-GITR antibodies. TG Therapeutics is headquartered in New York City.

Investment Thesis

We like the company's capital-efficient strategy of utilizing therapeutics with relatively clean safety profiles in several proven therapeutic classes (e.g., anti-CD20 antibodies, PI3K-delta inhibitor) to develop novel combination therapies. We believe the addition of TG-1101 to ibrutinib is likely to be adopted in the high-risk R/R CLL setting if the pivotal Phase III GENUINE study is successful, while the proprietary doublet TG-1101 + TGR-1202 (also known as TG-1303) could serve patients across all lines of CLL. Also, these compounds are being evaluated in other lymphoma settings (DLBCL, iNHL) and multiple sclerosis, which could add significant upside. We expect shares to outperform on clinical and regulatory newsflow.

Valuation and Risks

Our $18 PT for TGTX is based on sum-of-the-parts (SOTP) net-present-value (NPV) analysis. We include a probability-adjusted NPV for **(1)** TG-1101 in high-risk R/R CLL and **(2)** TG-1303 in CLL, **(3)** a modest placeholder value for pipeline candidates, and finally **(4)** the company's current net cash position. We use a 10% discount rate with NO terminal growth value, which we believe is appropriate for companies that are similar to TGTX. Based on these assumptions, our NPV suggests a fair value of $18/share.

Investment Risks

Clinical And/Or Regulatory Risk

TG Therapeutics is a clinical-stage biotech which has significant investment risks. Given the lack of marketed products, TGTX's success is highly contingent on TG-1101 and TGR-1202's **(1)** successful completion of clinical development and **(2)** approval by the FDA, EMA, and other regulatory authorities. Any setbacks in clinical development or regulatory approval could have a significant negative impact on the stock price of the company.

Partner Risk

TG Therapeutics does not have full internal development capabilities and relies primarily on third parties for preclinical/clinical development and wholly on third parties for the manufacturing of product candidates.

Competition Risk

TG Therapeutics' business is largely dependent on the potential commercial success of its TG-1101 and TGR-1202 programs, which could face intense competition from **(1)** both current and emerging therapeutic products/classes and **(2)** unexpected adverse events, hampering uptake among physicians and patients. Many of the potential competitors in targeted indications (CLL, NHL, and MS) have substantially greater R&D resources, regulatory experience, and capital.

Intellectual Property Risk

TG Therapeutics' commercial success depends on its ability to obtain and secure IP protection for its product candidates and core technologies. If the company is unable to maintain adequate patent protection for key products including **(1)** TG-1101 and **(2)** TGR-1202, the duration of commercial exclusivity for these products could be significantly reduced.

Reimbursement/Pricing Pressure

Biotech drug-pricing strategy has recently come under increased scrutiny by lawmakers. So far, biotech companies have been able to set high prices for their products, but this ability could be moderated going forward.

Companies Mentioned in This Note

AbbVie Inc. (ABBV, $61.22, Buy, John Boris)
Bristol-Myers Squibb Company (BMY, $70.69, Buy, John Boris)
Celgene Corporation (CELG, $105.11, Buy, Yatin Suneja)
ProNAi Therapeutics Inc. (DNAI, $6.12, Buy, Edward Nash)
Merck & Co. Inc. (MRK, $56.57, Buy, John Boris)
Pfizer Inc. (PFE, $34.35, Neutral, John Boris)
TG Therapeutics, Inc. (TGTX, $7.78, Buy,)
Actelion Pharma (ALIOY, $40.79, NR)
AstraZeneca (AZN, $29.98, NR)
Biogen (BIIB, $283.08, NR)
Fortress Biotech (FBIO, $2.86, NR)
Gilead (GILD, $85.26, NR)
Infinity Pharma (INFI, $5.16, NR)
Innate Pharma (IPH:PAR, €13.05, NR)
Ligand Pharma (LGND, $121.37, NR)
MediciNova (MNOV, $6.63, NR)
Merck KGaA (MKGAY, $33.47, NR)
MorphoSys (MOR:ETR, €49.99, NR)
Novartis (NVS, $80.02, NR)
Opexa Therapeutics (OPXA, $3.09, NR)
Roche (RHHBY, $32.01, NR)
Teva (TEVA, $51.33, NR)
Boehringer Ingelheim (private, NR)
Biothera (private, NR)
LFB Group (private, NR)
MedDay Pharma (private, NR)

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*Total return (price appreciation + dividends)
**Price targets are within a 12-month period, unless otherwise noted
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