



TG Therapeutics

2015 ASCO Analyst & Investor Event

May 31, 2015

Forward Looking Safe Harbor Statement

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are often, but not always, made through the use of words or phrases such as “anticipates”, “expects”, “plans”, “believes”, “intends”, and similar words or phrases. Such statements involve risks and uncertainties that could cause TG Therapeutics’ actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are only predictions based on current information and expectations and involve a number of risks and uncertainties. Actual events or results may differ materially from those projected in any of such statements due to various factors, including the risks and uncertainties inherent in clinical trials, drug development, and commercialization. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement and TG Therapeutics undertakes no obligation to update these statements, except as required by law.

Event Agenda & Speakers

AGENDA	SPEAKER
Overview & Introductions	Michael S. Weiss, CEO of TGTX
TG-1101 & TGR-1202 Overview	Dr. Owen A. O'Connor
TG-1101 & TGR-1202 in NHL	Dr. Nathan Fowler
TG-1101 & TGR-1202 in CLL	Dr. Anthony Mato
Q&A Session	Dr.'s O'Connor, Fowler & Mato
Closing Remarks	

Owen A. O'Connor, MD, PhD

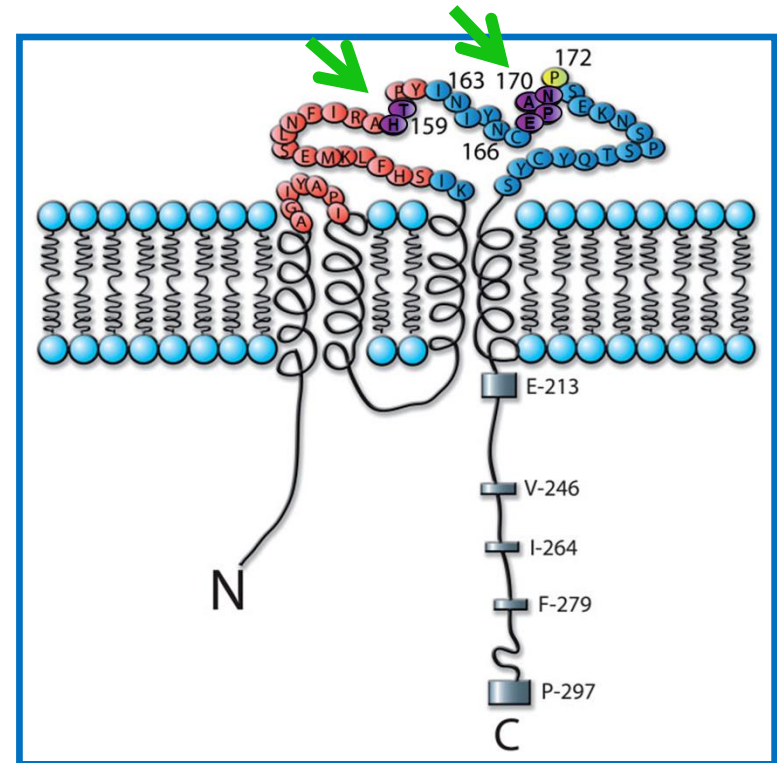
Professor of Medicine and Experimental Therapeutics
Director of the Center for Lymphoid Malignancies
Columbia University Medical Center

TG-1101 & TGR-1202 Single Agent

TG-1101
(UBLITUXIMAB)

Ublituximab: A Novel Glycoengineered Anti-CD20 mAb

- Unique protein sequence
- Type 1 Chimeric IgG1 mAb
- Potential advantages over current standard of care:
 - Glycoengineered for significantly enhanced ADCC
 - Activity in “low” CD20 expressing cell lines, a characteristic of rituximab resistance
 - Binds to a novel epitope on CD20



Safety of Ublituximab

- Day 1 Infusion Related Reaction most common adverse event
 - manageable with infusion interruptions only and recovered without sequelae
- Infusion times decreased to an average of 90 minutes for the 4th and all subsequent infusions

At Least Possibly Related AE's

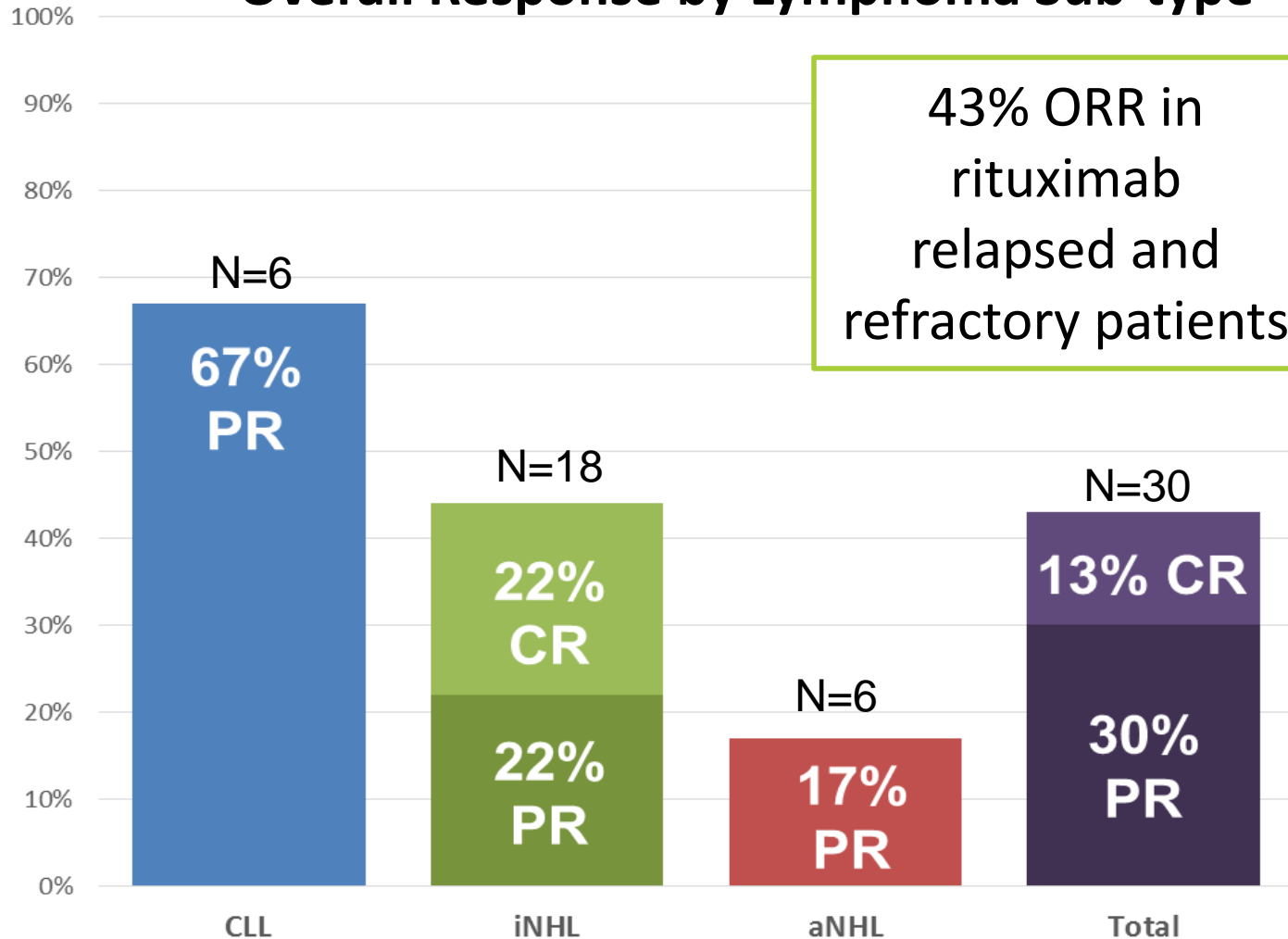
All Patients (n = 35)		
AE	All Grades n (%)	Grade 3/4 n (%)
Infusion Related Reaction*	10 (29%)	0
Fatigue	5 (14%)	1 (3%)
Diarrhea	4 (11%)	0
Pain (General)	4 (11%)	0
Dysgeusia	3 (9%)	0
Bilirubin Increase	2 (6%)	0
Pruritus	2 (6%)	0

At Least Possibly Related Lab Abnormalities

AE	CLL (n=8)		NHL (n=27)	
	Grade 1/2 n	Grade 3/4 n	Grade 1/2 n	Grade 3/4 n
Neutropenia	1	3	0	0
Thrombocytopenia	1	1	0	0
Anemia	0	0	0	1

Demonstrated single agent activity: TG-1101 Phase 1 Efficacy Results ASCO/EHA 2014

Overall Response by Lymphoma Sub-type



Ublituximab – Take Home Messages

- Well tolerated with minimal IRR complications
- Promising activity in both rituximab relapsed and rituximab refractory patients across all histologies
 - Interesting activity in iNHL—e.g. one rituximab refractory MZL patient transition from hospice to durable (2+ year) Complete Response
- 11 of 30 evaluable patients remained on study >1 year with no complications (2 patients on study >2 years)

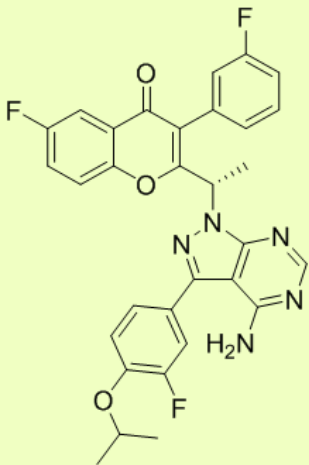
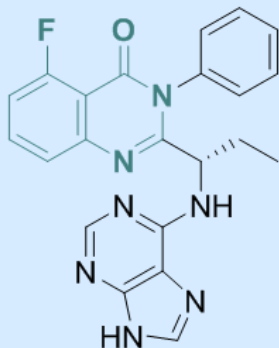
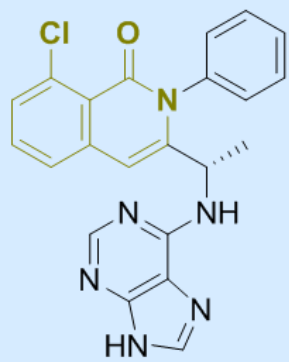
TGR-1202
SINGLE AGENT

Clinical activity and safety profile of TGR-1202, a novel once daily PI3K δ inhibitor, in patients with CLL and B-cell lymphoma.

Howard A. Burris III, MD^{1,2}, Manish R. Patel, MD^{1,3}, Timothy S. Fenske, MD⁴, Owen A. O'Connor, MD, PhD⁵, Changchun Deng, MD, PhD⁵, Danielle M. Brander, MD⁶, Martin Gutierrez, MD⁷, Suzanne Jones, PharmD¹, John Kuhn, PharmD⁸, Hari P. Miskin, MS⁹, Peter Sportelli⁹, Swaroop Vakkalanka, PhD¹⁰ and Ian Flinn^{1,11}

¹Sarah Cannon Research Institute, Nashville, TN; ²Tennessee Oncology, PPLC, Nashville, TN; ³Florida Cancer Specialists, Sarasota, FL; ⁴Medical College of Wisconsin, Milwaukee, WI; ⁵Columbia University Medical Center, New York, NY; ⁶Duke University Medical Center, Durham, NC; ⁷John Theurer Cancer Center at Hackensack University Medical Center, Hackensack, NJ; ⁸University of Texas Health Science Center at San Antonio, San Antonio, TX; ⁹TG Therapeutics, Inc., New York, NY; ¹⁰Rhizen Pharmaceuticals SA, La Chaux-de-Fonds, Switzerland; ¹¹Tennessee Oncology, PLLC, Nashville, TN

TGR-1202: Novel PI3K delta Inhibitor

TGR-1202	Idelalisib (GS-1101)	Duvelisib (IPI-145)
 <p>The chemical structure of TGR-1202 features a central pyrazolo[1,5-a]pyrimidin-2-amine core. It is substituted with a 4-fluorophenyl group, a 2-fluorophenyl group, and a 4-(2-fluorophenoxy)phenyl group. A methyl group is attached to the 4-position of the pyrazolo[1,5-a]pyrimidin-2-amine ring.</p>	 <p>The chemical structure of Idelalisib (GS-1101) consists of a pyrazolo[1,5-a]pyrimidin-2-amine core. It is substituted with a 4-fluorophenyl group, a phenyl group, and a 2-((S)-1-methylaminoethyl)amino group.</p>	 <p>The chemical structure of Duvelisib (IPI-145) features a pyrazolo[1,5-a]pyrimidin-2-amine core. It is substituted with a 4-chlorophenyl group, a phenyl group, and a 2-((S)-1-methylaminoethyl)amino group.</p>
Delta	Delta	Delta/Gamma
QD	BID	BID

- PK profile that allows once-daily oral dosing
- 93% nodal PR rate in patients with rel/ref CLL¹

¹Burris et al, ASCO 2015, Abstract # 7069

Demographics

Evaluable for Safety (n)	66	
Evaluable for Efficacy (n)	51	
Median Age, years (range)	66 (22 – 85)	
Male/Female	46/20	
Histology	20 CLL	5 MCL
	17 FL	3 MZL
	10 DLBCL	1 HCL
	9 HL	1 WM
ECOG 0/1/2	22/43/1	
Prior Therapies, median (range)	3 (1 – 14)	
Patients with ≥ 3 Prior Therapies (%)	36 (55%)	
Patients Refractory to Prior Therapy	34 (52%)	

† Patient's evaluable for efficacy included only patients treated with 800 mg of initial formulation or higher, and any micronized dose level of which the following were excluded: 4 were Too Early To Evaluate, 2 Non-Compliant (both at 1800 mg Fasted), 1 removed per investigator discretion, and 1 Failed Inclusion/Exclusion (Richter's Transformation prior to entry)

Adverse Events in TGR-1202 Treated Patients

All Events in >10% of Pts (N=66)				
AE	All Grades		Gr. 3/4	
	N	%	N	%
Nausea	27	41%	0	0%
Diarrhea	21	32%	1	2%
Fatigue	21	32%	2	3%
Headache	15	23%	0	0%
Vomiting	15	23%	0	0%
Cough	14	21%	0	0%
Decreased Appetite	11	17%	0	0%
Rash	11	17%	3	5%
Constipation	9	14%	1	2%
Hypokalemia	9	14%	3	5%
Anemia	8	12%	5	8%
Dizziness	8	12%	0	0%
Dyspnea	8	12%	3	5%
Neutropenia	8	12%	7	11%
Pyrexia	8	12%	0	0%
Abdominal Pain	7	11%	0	0%

- ❖ Limited Gr. 3/4 events and no significant dose or time dependent trends in AEs observed with 31 patients on study 6+ months
- ❖ **3 patients (< 5%) have discontinued due to an adverse event, none of which for hepatic toxicity, colitis, or pneumonitis**

PI3K-Delta Class AE Profile

	Idela + Ofa (ASCO '15) ² (n=173)	Duvelisib (ASCO '15) ³ (n=18)	Idelalisib Label (CLL & NHL) ¹ (n=256)	TGR-1202 All Studies (ASCO 2015) ⁴ (n=137)
	All Grades (≥Gr 3)	All Grades (≥Gr 3)	All Grades (≥Gr 3)	All Grades (≥Gr 3)
Diarrhea/ Colitis	49% (20%)	78% (22%)	36% (10%)	26% (1%) ^{**}
Pneumonia	17% (13%)	N/A	24% (16%)	7% (4%)
ALT Elevations	N/A	N/A	43% (11%)	2% (2%)
AST Elevations	N/A	N/A	34% (7%)	4% (2%)
ALT/AST Elevations	35% (13%)	28% (17%)	N/A	3% (2%)
Discontinuations due to AE	31%	33%	12%	4%

¹Aggregated from Idelalisib Prescribing Information

²Jones et al, ASCO 2015

³Patel et al, ASCO 2015

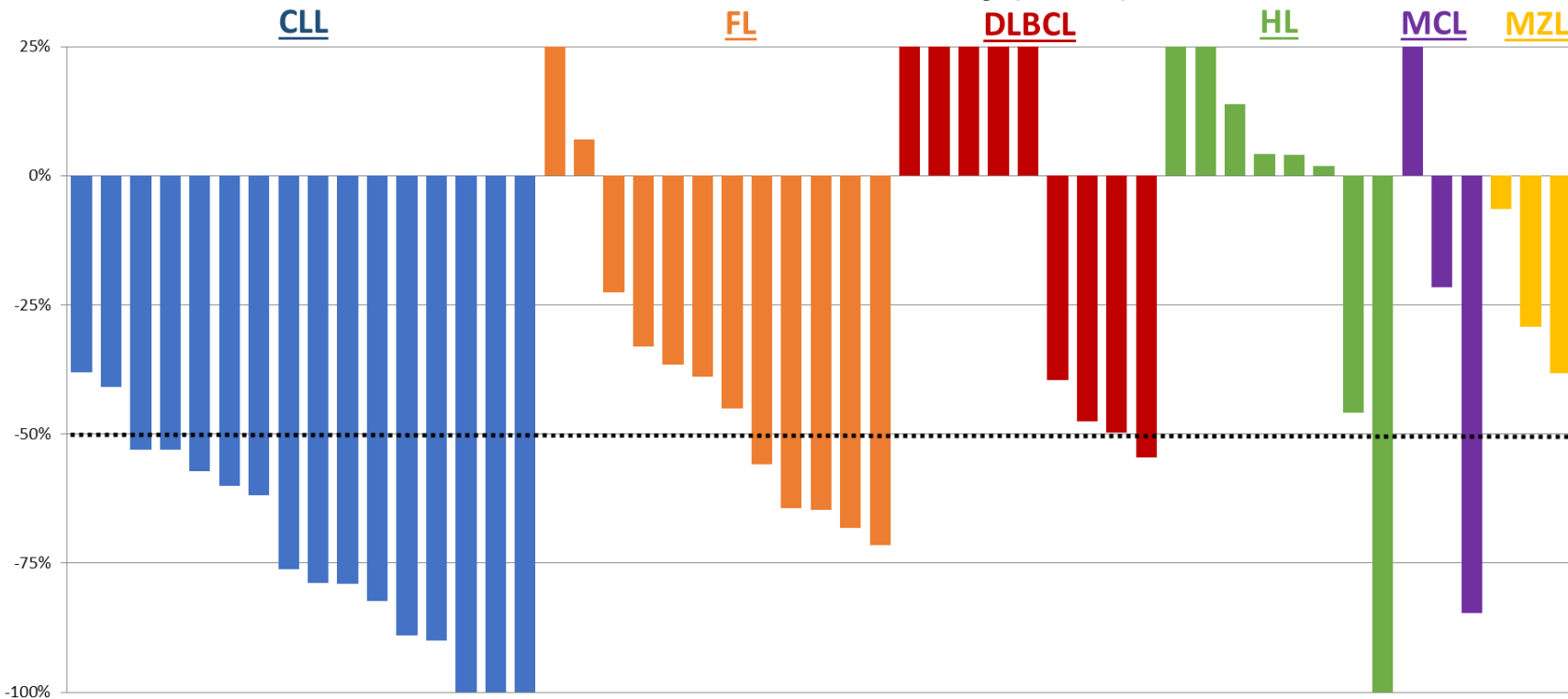
⁴ Aggregated from Burris et al, Lunning et al, Fowler et al, ASCO 2015

**** No observed instances of colitis**

Overall Efficacy

Best Percent Change from Baseline in Nodal Size

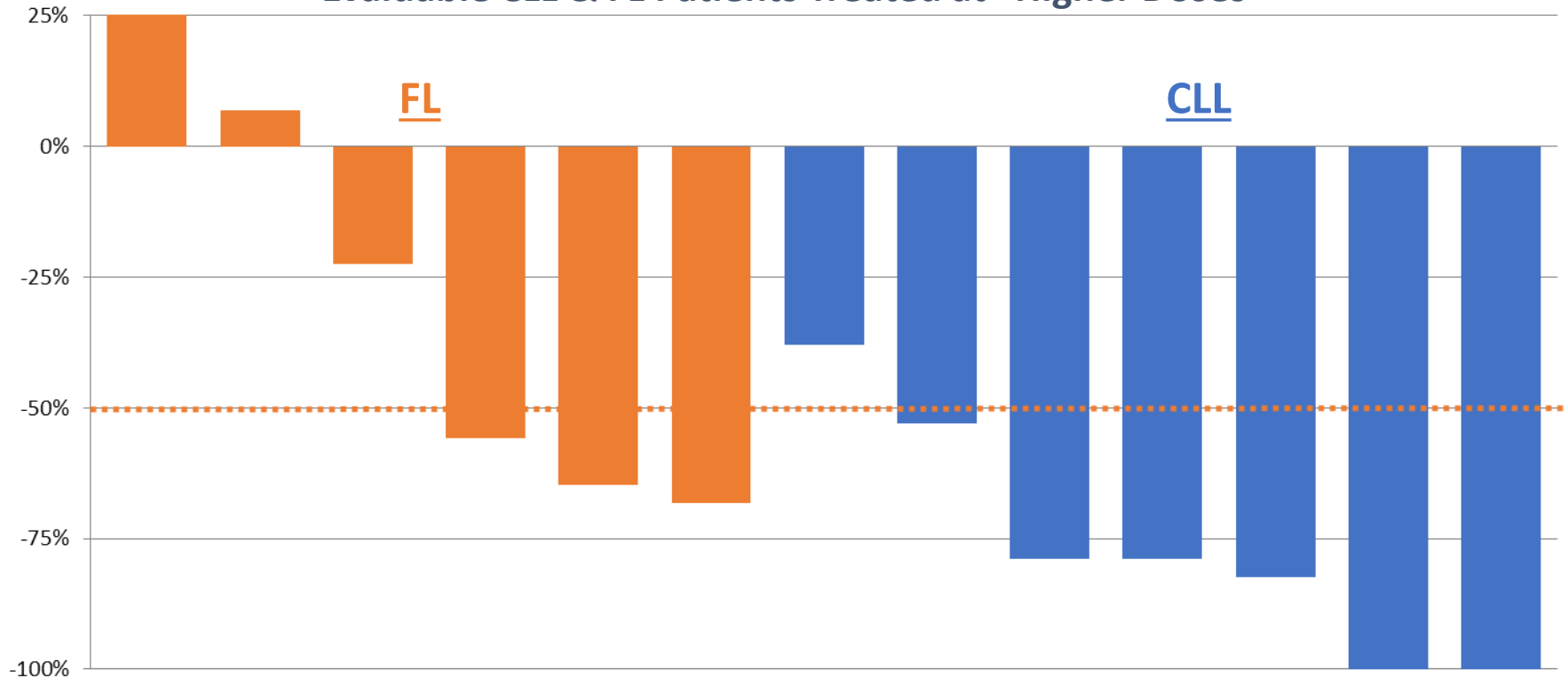
Patients Evaluable for Efficacy (N=51)



- ❖ High level of activity demonstrated across a wide variety of hematologic malignancies

Best Percent Change from Baseline in Nodal Size

Evaluable CLL & FL Patients Treated at “Higher Doses”



- ❖ “Higher Doses” of TGR-1202 (1200 mg initial formulation, or \geq 600 mg micronized) demonstrated rapid and profound responses

TGR-1202 Take Home Messages

- Once-daily PI3K δ inhibitor with single agent activity across B-cell malignancies
 - 88% nodal response rate in rel/ref CLL;
 - 42% ORR in rel/ref FL
 - Patients remaining on therapy pending further efficacy assessments
- Differentiated safety profile from other PI3K δ inhibitors
 - Hepatic toxicity
 - Diarrhea/colitis
 - Pneumonia/pneumonitis
 - Discontinuations due to AE's have been rare

Nathan Fowler, MD

Associate Professor
Lead, New Drug Development
MD Anderson Cancer Center

Combination of TG-1101 & TGR-1202
“TG-1303”

Ublituximab + TGR-1202 Demonstrates Activity and Favorable Safety Profile in Relapsed/Refractory B-Cell NHL and High-Risk CLL

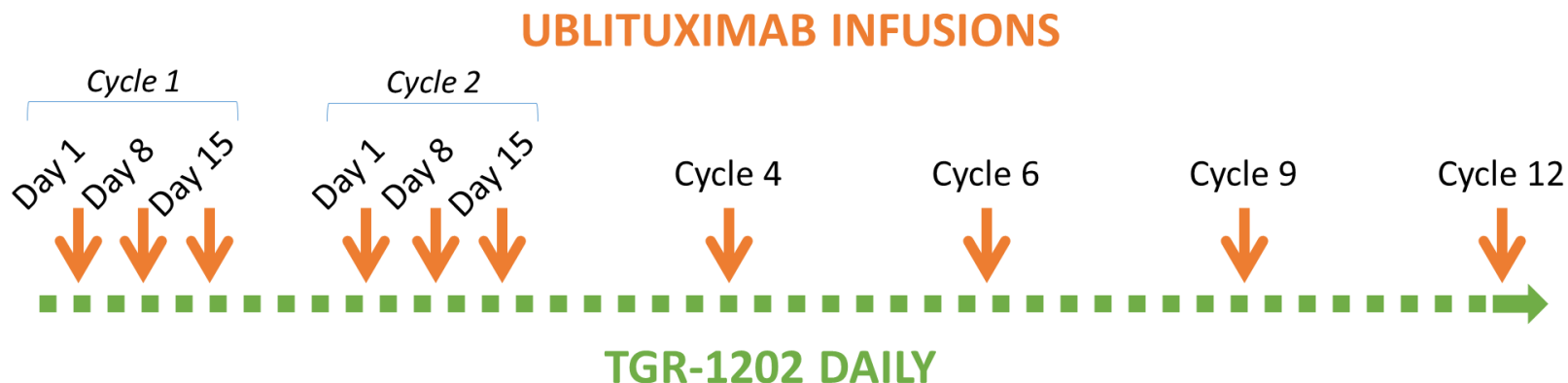
Matthew Lunning, DO¹, Julie Vose, MD¹, Nathan Fowler, MD², Loretta Nastoupil, MD², Jan A. Burger, MD², William G. Wierda, MD², Marshall T. Schreeder, MD³, Tanya Siddiqi, MD⁴, Christopher Flowers, MD⁵, Jonathon Cohen, MD⁵, Susan Blumel, RN, BSN¹, Myra Miguel, RN², Emily K. Pauli, PharmD³, Kathy Cutter, RN³, Brianna Phye, BS⁴, Peter Sportelli⁶, Hari P. Miskin, MS⁶, Michael S. Weiss⁶, Swaroop Vakkalanka, PhD⁷, Srikant Viswanadha, PhD⁸ and Susan O'Brien, MD⁹

¹University of Nebraska Medical Center, Omaha, NE; ²MD Anderson Cancer Center, Houston, TX; ³Clearview Cancer Institute, Huntsville, AL; ⁴City of Hope National Medical Center, Duarte, CA; ⁵Emory University/Winship Cancer Institute, Atlanta, GA; ⁶TG Therapeutics, Inc., New York, NY; ⁷Rhizen Pharmaceuticals S.A, La Chaux-de-Fonds, Switzerland; ⁸Incozen Therapeutics, Hyderabad, India; ⁹University of California Irvine, Orange, CA

Study Design

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	1200 mg (micronized)
Expansion	<i>Currently Enrolling Expansion Cohorts with TGR-1202 at 800 mg and 1200 mg micronized</i>		

Treatment Schedule:



Demographics

Evaluable for Safety (n)	55	
Evaluable for Efficacy[†] (n)	39	
Median Age, years (range)	64 (29 – 86)	
Male/Female	36/19	
Histology	CLL/SLL	15
	DLBCL	16
	FL	16
	MZL	5
	MCL	2
	Richter's	1
ECOG, 0/1/2	17/37/1	
Prior Therapies, median (range)	3 (1 – 9)	
Patients with ≥ 3 Prior Therapies (%)	60%	
Prior RTX Based Therapies, median (range)	3 (1 – 7)	
Refractory to Prior Therapy, n (%)	28 (51%)	

[†]16 Patients not evaluable (13 too early, 1 non-related AE, 1 removed per investigator discretion, 1 ineligible)

Safety

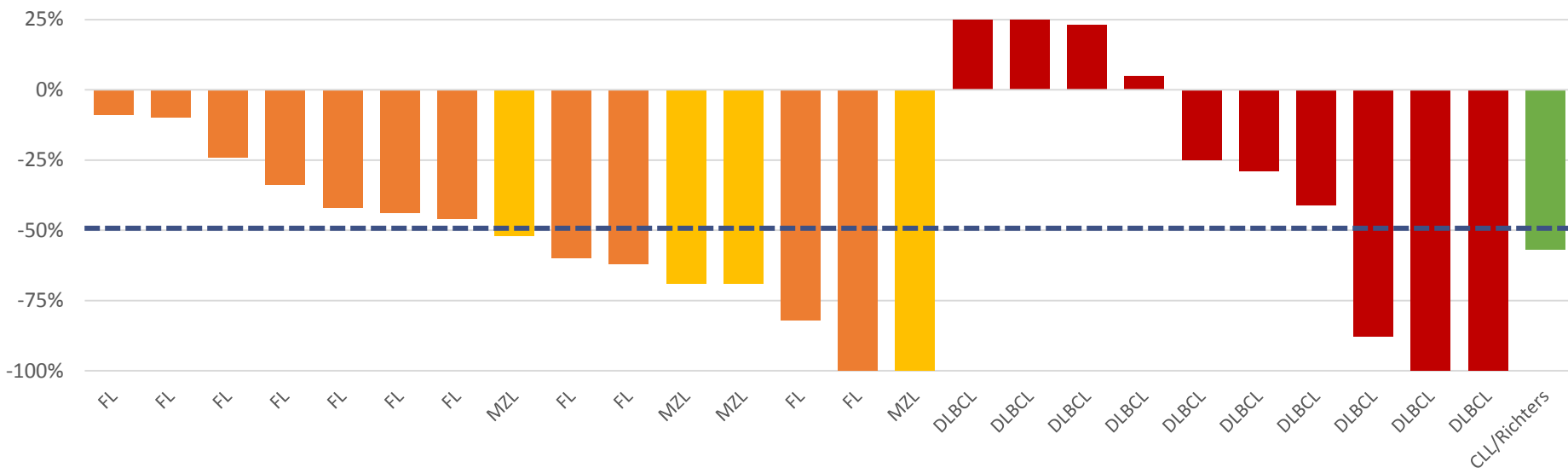
Related AE's Occurring in $\geq 5\%$ of Patients (n = 55)

Adverse Event	All Grades		Grade 3/4	
	N	%	N	%
Infusion Related Reaction	16	29%	1	2%
Neutropenia	15	27%	13	24%
Nausea	15	27%	-	-
Diarrhea	11	20%	1	2%
Fatigue	10	18%	-	-
Vomiting	6	11%	-	-
Abd. Pain/Discomfort	4	7%	-	-
Muscle Cramping	4	7%	-	-
Anemia	3	5%	-	-
Bruising	3	5%	-	-
Hoarseness	3	5%	-	-
Thrombocytopenia	3	5%	-	-

- ❖ 3 patients (~5%) have come off study due to an adverse event, none related to hepatic toxicity or colitis

TG-1101 + TGR-1202 – NHL

Best Percent Change from Baseline in Nodal Size



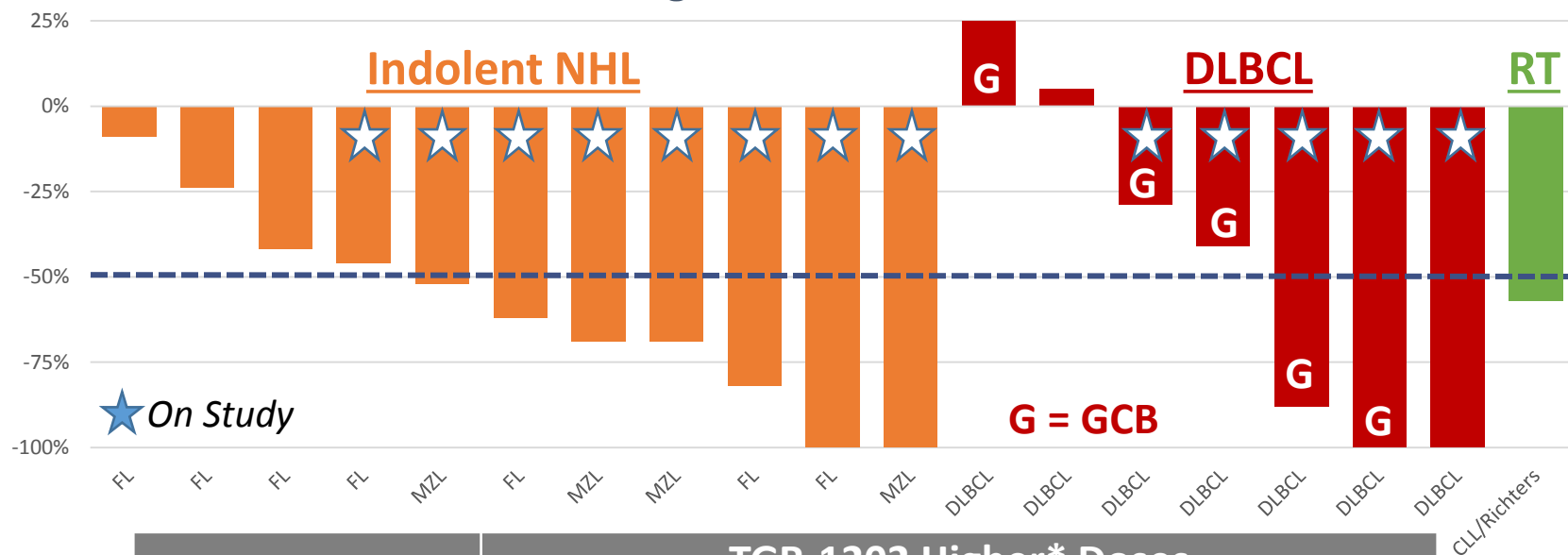
Type	TGR-1202 Higher* Doses						Type	TGR-1202 Lower** Doses					
	Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)		Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)
CLL/SLL	6	-	5	5 (83%)	1	-	CLL/SLL	7	1	3	4 (57%)	3	-
DLBCL	7	2	1	3 (43%)	3	1	DLBCL	3	-	-	-	1	2
FL/MZL	11	2	5	7 (64%)	4	-	FL/MZL	4	-	1	1 (25%)	3	-
Richter's	1	-	1	1 (100%)	-	-	Richter's	-	-	-	-	-	-
Overall	25	4	12	16 (64%)	8	1	Overall	14	1	4	5 (36%)	7	2

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

**Lower Dose = 800 original formulation and 400 micronized

TG-1101 + TGR-1202 – Higher Doses NHL

Patients Treated at the “Higher Doses” of TGR-1202 Best Percent Change from Baseline in Nodal Size



Type	TGR-1202 Higher* Doses					
	Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)
CLL/SLL	6	-	5	5 (83%)	1	-
DLBCL	7	2	1	3 (43%)	3	1
FL/MZL	11	2	5	7 (64%)	4	-
Richter's	1	-	1	1 (100%)	-	-
Overall	25	4	12	16 (64%)	8	1

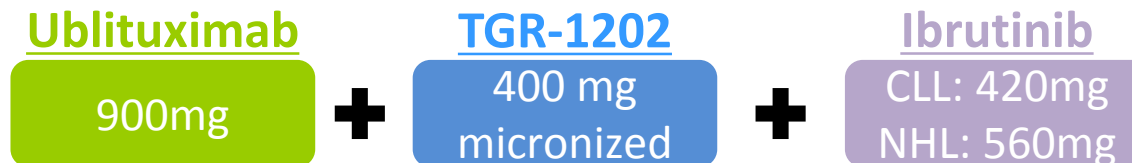
*Higher Dose = 1200 original formulation and 600 or > micronized

TG-1101 + TGR-1202 Take Home Messages

- Combination is well tolerated
 - Grade 3/4 AE's and discontinuations due to AE's have been limited (~5%)
- Activity of the combination has been observed in indolent NHL, and GCB-DLBCL
- Safety profile supports additional multi-drug combination regimens
 - TG-1101 + TGR-1202 + Ibrutinib, oral presentation
Monday, June 1, 2015

ASH 2014: TGR-1202 + Ublituximab + Ibrutinib

- Initial cohorts for both NHL and CLL (n=5)



Histology	Description	Prior # Rx	Prior Ibrutinib	Rel/Ref	Rituximab Refractory	Response	% ↓
Follicular	Stage IV	4	Refractory	Refractory	Yes	PR	74%
MCL	Advanced	2	No	rAuto txp	No	CR	PET -
Richter's	17p	3	No	Refractory	Yes	PD	N/A
CLL	17p	2	No	Refractory	Yes	Too Early	N/A
Follicular	Stage IV	1	No	Refractory	Refractory	Too Early	N/A

- Tomorrow's update to include additional patients evaluable for safety and efficacy

Anthony R. Mato, MD

**Director, Center for CLL
University of Pennsylvania**

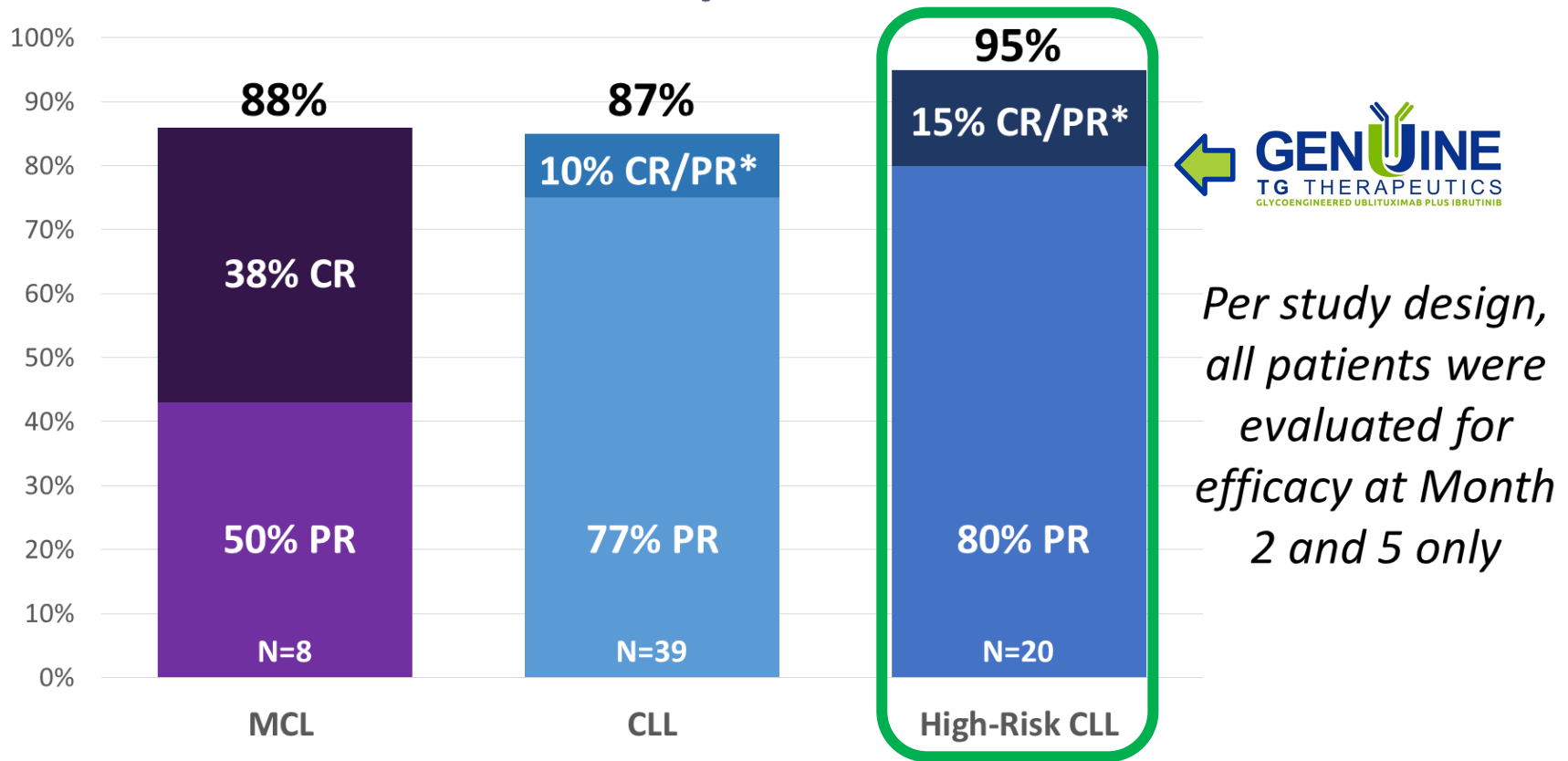
**The GENUINE Phase 3 Study
&
TGR-1202 + TG-1101 Combination**

**GENUINE
PHASE 3 STUDY**

Phase II: Ublituximab + Ibrutinib

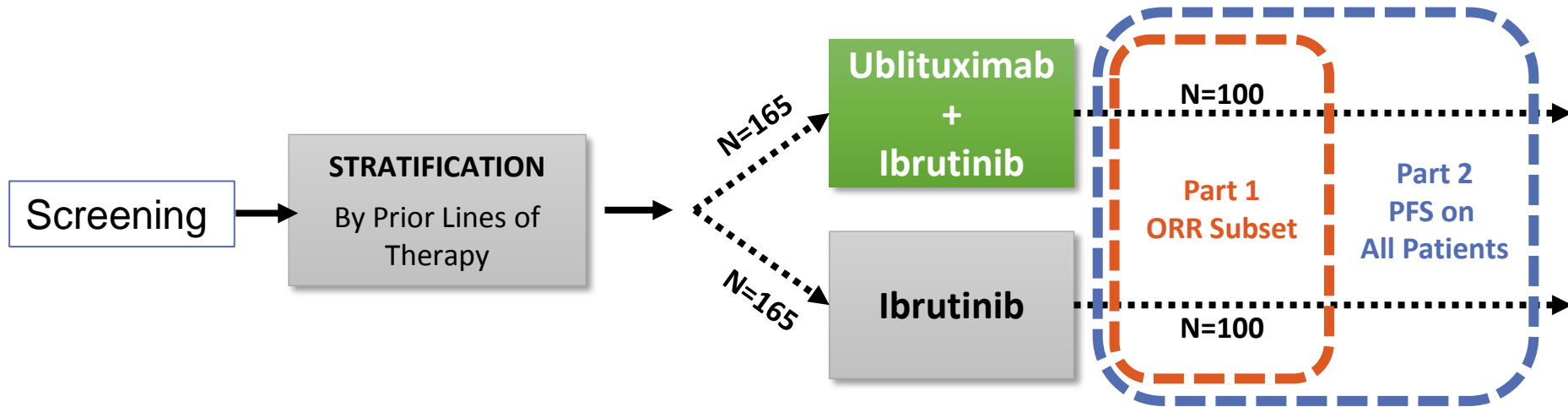
Overall Efficacy

Best Overall Response Rate



CLL assessed by iwCLL (Hallek 2008) Criteria; MCL/SLL assessed by Cheson, 2007 Criteria
PR* = Complete Response per iwCLL criteria, pending bone marrow confirmation

The GENUINE Phase 3 Trial



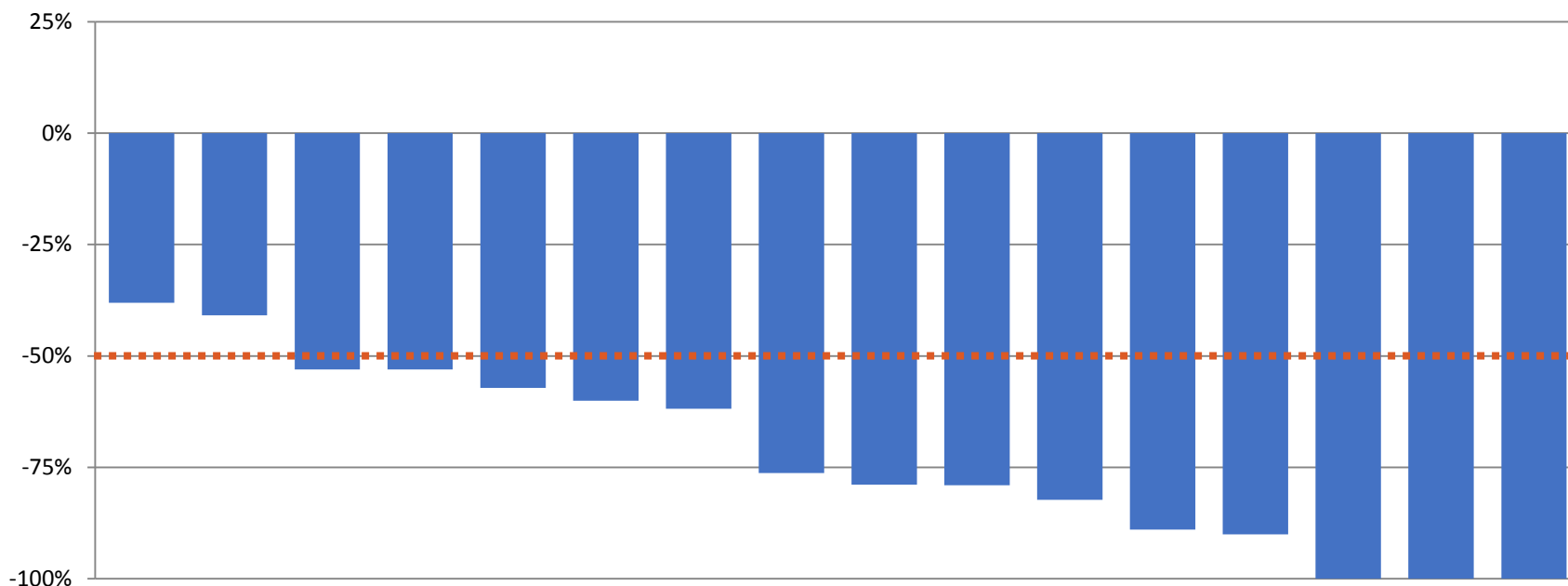
- Design, Endpoints, and Statistics agreed to via Special Protocol Assessment (SPA)
- Enrolling ~330 patients with high-risk CLL
- **Part 1:** ORR among first 200 patients
- **Part 2:** PFS of all 330 patients
 - Part 1 to be analyzed following full enrollment of study



**TGR-1202 SINGLE
AGENT
&
TG-1101 + TGR-1202
IN CLL**

TGR-1202 Single Agent – CLL

Best Percent Change from Baseline in Nodal Size Patients Evaluable for Efficacy (N=16)

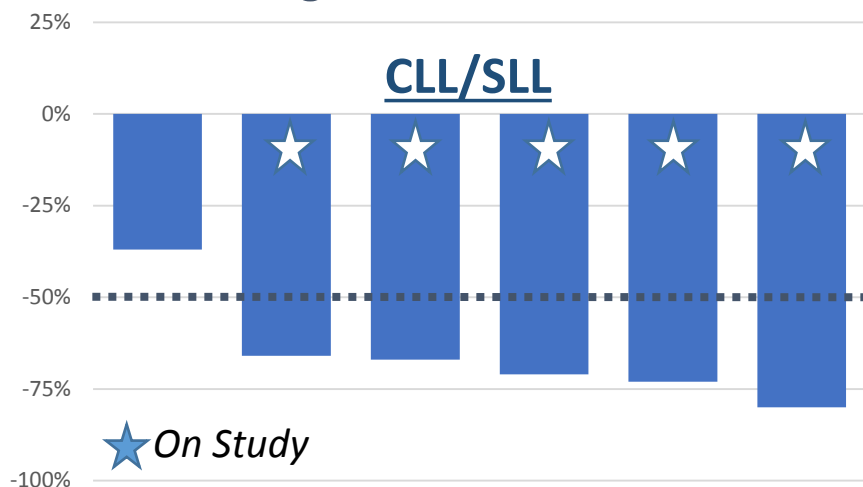


- 88% of CLL patients (14/16) achieved a nodal PR, remaining 2 patients still on study pending further evaluation
- 63% of CLL patients (10/16) achieved a response per iwCLL (Hallek 2008) criteria

TG-1101 + TGR-1202 – CLL

Patients Treated at the “Higher Doses” of TGR-1202

Best Percent Change from Baseline in Nodal Size



70% of CLL patients had high-risk cytogenetics (17p del and/or 11q del)

Type	TGR-1202 Higher* Doses						Type	TGR-1202 Lower** Doses					
	Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)		Pts (n)	CR (n)	PR (n)	ORR n (%)	SD (n)	PD (n)
CLL/SLL	6	-	5	5 (83%)	1	-	CLL/SLL	7	1	3	4 (57%)	3	-
DLBCL	7	2	1	3 (43%)	3	1	DLBCL	3	-	-	-	1	2
FL/MZL	11	2	5	7 (64%)	4	-	FL/MZL	4	-	1	1 (25%)	3	-
Richter's	1	-	1	1 (100%)	-	-	Richter's	-	-	-	-	-	-
Overall	25	4	12	16 (64%)	8	1	Overall	14	1	4	5 (36%)	7	2

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

**Lower Dose = 800 original formulation and 400 micronized

TG-1101 + TGR-1202

Safety supports further combination studies

Related AE's Occurring in $\geq 5\%$ of Patients (n = 55)

Adverse Event	All Grades		Grade 3/4	
	N	%	N	%
Infusion Related Reaction	16	29%	1	2%
Neutropenia	15	27%	13	24%
Nausea	15	27%	-	-
Diarrhea	11	20%	1	2%
Fatigue	10	18%	-	-
Vomiting	6	11%	-	-
Abd. Pain/Discomfort	4	7%	-	-
Muscle Cramping	4	7%	-	-
Anemia	3	5%	-	-
Bruising	3	5%	-	-
Hoarseness	3	5%	-	-
Thrombocytopenia	3	5%	-	-

- ❖ ~5% have come off study due to an adverse event
- ❖ No patients at ≥ 800 mg micronized TGR-1202 have discontinued due to an AE

Newest Triple Combination Study

Phase I/II study of pembrolizumab in combination with TG-1101 (ublituximab) and TGR-1202 in patients with relapsed-refractory CLL

A unique opportunity to correct immunological defects which allow CLL to escape immune surveillance

A research collaboration between University of Pennsylvania, Center for CLL and TG Therapeutics

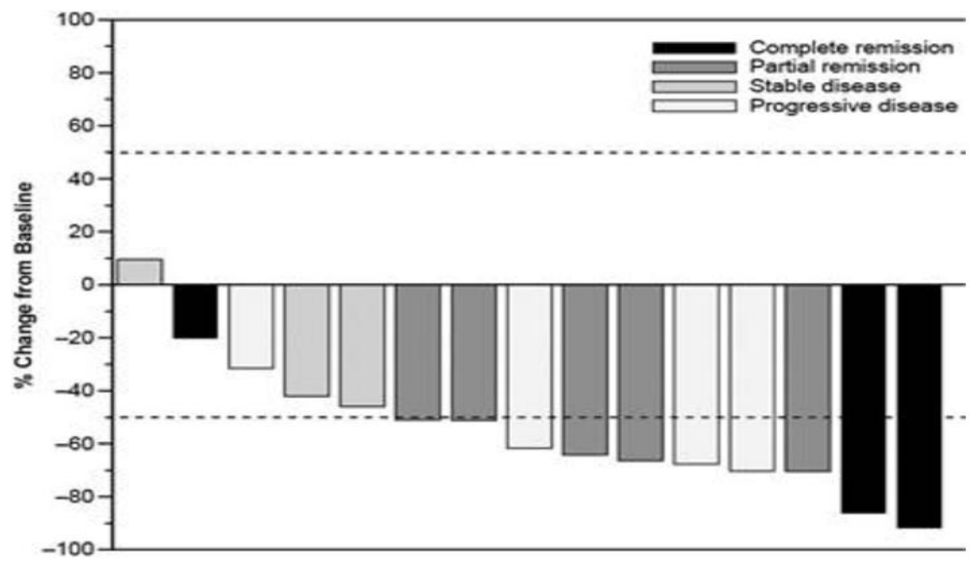
Study Rationale: PD-1 Blockade and CLL

- Malignant cells utilize PD-1 receptor-ligand pathway to evade immune surveillance by inactivating cytotoxic T cells via PD-L1 expression.
- CLL: Preclinical data demonstrates the importance PD-1 / PD-L1 signaling
 - PD-1 expression is significantly higher in CLL patients (T cells) vs. healthy donors.
 - CLL cells expresses higher PD-L1 and PD-1 vs. circulating B lymphocytes from healthy donors.
 - CD4+/PD-1+ T lymphocytes are found to be in close contact with PD-L1+ CLL cells.
 - In vivo data demonstrate that early PD-L1 blockade effectively controls CLL development in TCL1 murine model for CLL.

Pembrolizumab is a highly selective, humanized IgG4/kappa monoclonal antibody that binds PD-1, and prevents its interaction with its ligands.

Recent data highlight the **activity and immense potential** of anti PD-1 antibodies in patients with Hodgkin lymphoma and B cell lymphoproliferative disorders.

Response Rates	Objective Response Rate, n (%)	Complete Responses, n (%)	Partial Responses, n (%)	Stable Disease n (%)
B-Cell Lymphoma* (n=29)	8 (28)	2 (7)	6 (21)	14 (48)
Follicular Lymphoma (n=10)	4 (40)	1 (10)	3 (30)	6 (60)
Diffuse Large B-Cell Lymphoma (n=11)	4 (36)	1 (9)	3 (27)	3 (27)



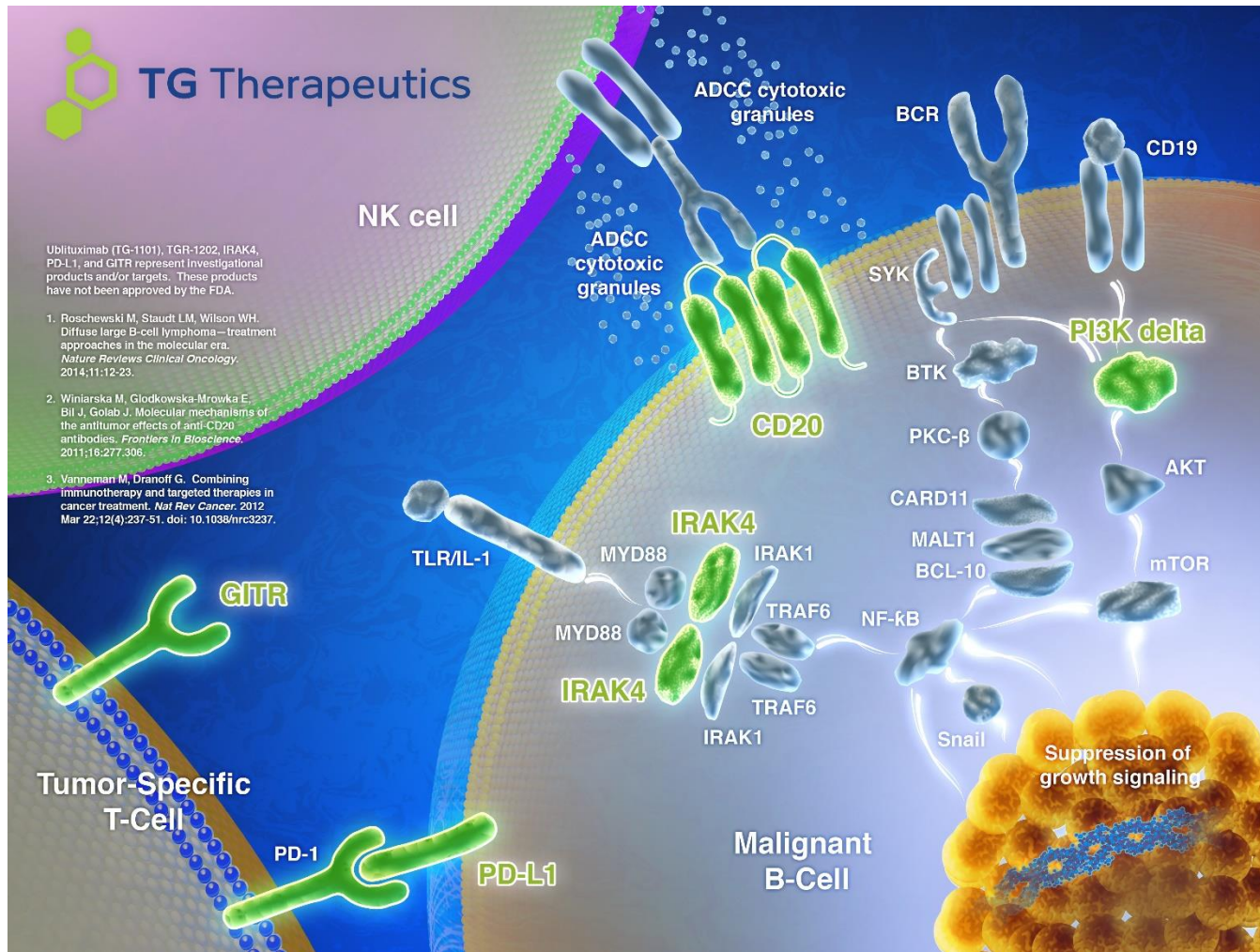
Response rate in HD

- 3 patients (20%) = CR
- 5 patients (33%) = PR
- Best ORR = 53%

Lesokhin et al. ASH 2014, Abstract 291.

Moscowitz et al, Blood. 2014;124(21):290-290.

Hypothesis



TG1101 + TG1202 doublet is an ideal platform for combination with anti-PD1 therapy based on clinical activity and non overlapping safety profile.

Pembrolizumab will enhance the efficacy of host T cells to induce apoptosis in CLL patients following TG-1101 and TGR-1202 induction.

Objectives

Primary objective:

Determine the safety of pembrolizumab + ublituximab + TGR-1202 following ublituximab and TGR-1202 in patients with relapsed-refractory CLL.

Secondary objectives:

- Describe the clinical efficacy of pembrolizumab triplet combination therapy in patients with relapsed-refractory CLL.
- Describe changes T cell repertoire and PD-1 / PD-L1 expression in subjects at planned time points pre and post pembrolizumab

Questions?



TG Therapeutics

2015 ASCO Analyst & Investor Event

May 31, 2015