



**TLSA: NASDAQ** TILS: AIM



**tiziana**  
LIFE SCIENCES

An Innovative Platform in Oral and  
Nasal Antibody Administration

A Novel Approach for Treatment  
of Hepatocellular Carcinoma

**INVESTOR PRESENTATION**  
**August 2019**

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We have filed a registration statement (including a preliminary prospectus) with the SEC for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about us and the offering.

You may access these documents for free by visiting EDGAR on the SEC Web site at <http://www.sec.gov>. The preliminary prospectus, dated August 5, 2019, is available on the SEC Web site at <http://www.sec.gov>. Alternatively, we or any underwriter participating in the offering will arrange to send you the prospectus if you contact ThinkEquity, a division of Fordham Financial Management, Inc., located at 17 State Street, 22nd Floor, New York, New York 10004, by telephone at (877) 436-3673, or by email at [prospectus@think-equity.com](mailto:prospectus@think-equity.com).

# OFFERING SUMMARY

**ISSUER:** TIZIANA LIFE SCIENCES, PLC

<b>Approximate Offering Size</b>	\$10.0 Million of ADSs
<b>Listings/Symbols</b>	Nasdaq Global Market / TLSA and AIM / TLS
<b>Over-Allotment Option</b>	15%
<b>Use of Proceeds</b>	Advance the clinical development of Foralumab and Milciclib, and other research and development programs, working capital and other general corporate purposes
<b>Sole Book-Running Manager</b>	ThinkEquity, a division of Fordham Financial Management, Inc.

# INVESTMENT HIGHLIGHTS

**Innovative platform technology for oral and nasal formulations can transform the administration of Monoclonal Antibodies ('mAbs')**

**Two de-risked assets in clinical evaluation that target the root causes of autoimmune/inflammatory diseases and cancer**

**Milciclib has received 'Orphan Drug Designation' in US and EU for treatment of thymic carcinoma/thymoma (TC/T)**

**Assets for unmet needs in a multi billion-dollar addressable market**

- NASH - \$35 billion
- Crohn's Disease - \$10 billion/year by 2025
- Liver cancer - \$1.5 billion/year by 2022

**Strong intellectual property**

- 255 patents approved and 30 pending
- Covers composition of matter, process and disease indications
- Oral formulation technology applicable to other mAbs therapeutics

**Experienced and successful biotech management team**

**A leverageable biotechnology platform for use in additional therapeutics**

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Nasal Trial: Phase 2 starting shortly.

Phase 1 trial completed

Data - August 2019

Oral Trial: In consultation with FDA for IND submission

**Milciclib**  
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Orphan Drug Designation  
Met primary and secondary endpoints in 2 separate Phase 2 trials in TC/T.

Phase 2a in sorafenib-resistant patients completed

Well-tolerated topline data reported July 2019

# LEADERSHIP AND EXECUTIVE TEAM

## Kunwar Shailubhai PhD, MBA CEO & CSO



- Inventor of Oral Formulation of Foralumab
- Co-founder , EVP & CSO of Synergy Pharmaceuticals, NASDAQ: SGYP
- The pioneer of GC-C agonist technology inventor of TRULANCE approved for Chronic constipation and IBS-C
- VP, Callisto Pharmaceuticals

Dr. Shailubhai brings more than 25 years of experience within the life science industry, combined with a distinguished track record of success in translating drugs from concept through commercialization to market. He also currently serves as CEO of Rasna Therapeutics, Inc., a developer of therapeutics to address the high unmet need that exists for AML and other forms of leukemia. Dr. Shailubhai has been serving as a member of board of Tiziana Life Sciences since 2015. He actively played key roles in development of growth strategies through several key licensing of technologies and drug candidates. Dr. Shailubhai steered the Company through prioritization of projects to focus on novel drug candidates for treatment of autoimmune and inflammatory diseases and cancer. As co-founder, EVP and CSO of Synergy Pharmaceuticals, Inc. (NASDAQ: SGYP) he led the non-clinical, CMC and clinical development of Trulance™ from inception to approval by the FDA, having co-invented and pioneered Synergy's platform technology for functional GI disorders, inflammatory bowel disease, GI cancer and other human diseases. Dr. Shailubhai as the chief architect of the IP estate, directed all aspects of IP management, including timely submission of patent applications, directing office actions and coordinating with IP attorneys. Earlier, from 2003 until 2008, Dr. Shailubhai served as Senior Vice President, Drug Discovery and from 2001 to 2003, he held the position of Vice President, Drug Discovery at Synergy, where he pioneered therapeutic applications of GC-C agonists in a variety of human diseases such as Asthma, COPD and cholesterol lowering. Prior to Synergy, he was with Monsanto Company, serving as Group Leader, Cancer Prevention and previously served as a Senior Staff Fellow at the National Institutes of Health, and as an Assistant Professor at the University of Maryland. Dr. Shailubhai received his Ph.D. in microbiology from the University of Baroda, India, and his MBA from the University of Missouri, St. Louis. He has more than 36 issued patents, 20 patent applications and over 50 peer-reviewed publications.

## Tiziano Lazzaretti Chief Financial Officer



Mr. Lazzaretti has extensive experience in the healthcare and pharmaceutical industry and joined Tiziana from Pharmentis Srl, a spin-off from Teva Ratiopharm, where he served as Group Finance Director from 2011. Prior to this, Mr. Lazzaretti was Executive Director at Alliance Boots Healthcare, and held senior positions at Accenture, SNIA Spa and Fiat Group. Mr. Lazzaretti has a Bachelor of Science (BSc Hons) in Accounting and Finance from the University of Turin, Italy, was awarded a Master in Business Administration (MBA) from Bocconi University, Milan and studied Corporate Finance at the London Business School.



## BOARD OF DIRECTORS

### Gabriele Cerrone Executive Chairman



- Proven track record & experience in financing biotechnology companies
- Founder and chairman of two biotech companies with market cap over \$2 B
- Inhibitex sale \$2.5 B
- Synergy / Trovogene / Gensignia / Rasna / Contravir / Siga Technologies
- MBA, Stern School of Business, NY, USA

### Leopoldo Zambeletti Non-Executive Director



- Former head of Life Sciences M&A for Credit Suisse, EU
- Investment Banking experience at JP Morgan and Credit Suisse
- Non-exec. director several biotech companies

### Willy Simon Non-Executive Director



- Career as an executive in the banking and corporate finance sector and director of publicly listed companies
- Kredietbank N.V., Citibank, Generale Bank NL, CEO of Fortis Investment Management
- Chairman of Bank Oyens & van Eeghen, Partner at Redi & Partners

## SCIENTIFIC ADVISORY

### Howard Weiner, MD



- Professor of Neurology at Harvard Med
- Director and Founder of the Partners MS Center and Co-Director of the Ann Romney Center for Neurologic Diseases
- Pioneered investigation of the mucosal immune system for the treatment of autoimmune and other diseases

### Kevin Herold, MD



- Professor of Immunobiology and Medicine and Deputy Director, Yale Center for Clinical Investigation
- Director of the Yale Diabetes Center and Director of the TrialNet Center at Yale
- Expert in autoimmune diseases and anti-CD3 monoclonal antibody therapies

### Arun Sanyal MD



- Charles Caravati Distinguished Professor and Chair, Division of Gastroenterology, Hepatology and Nutrition at Virginia Commonwealth University School of Medicine
- Leader in the field of liver diseases

### Napoleone Ferrara MD



- Inventor of Avastin® (\$6.67Bn/yr); 2010 Lasker Award
- Senior Deputy Director Basic Sciences, Moores Cancer Center, UC San Diego
- Distinguished Prof of Pathology, School of Medicine, UC San Diego

# A REVOLUTIONARY PLATFORM

## SWITCH ANTIBODY ADMINISTRATION FROM INTRAVENOUS TO ORAL AND NASAL ROUTES

TODAY'S ANTIBODY ADMINISTRATION OPTIONS ARE MOSTLY I.V.



- Costly Infusion Center
- Poor patient compliance
- Higher toxicity
- Systemic treatment to affect whole body
- Infusion related side effects

tiziana  
platform enables...



Antibodies (mAbs)  
reformulated for oral  
administration



Antibodies (mAbs)  
reformulated for nasal  
administration

ROUTE OF ORAL OR NASAL  
ADMINISTRATION DEPENDS ON DISEASES

### PATIENT & PROVIDER BENEFITS

Ease of use  
Superior compliance  
Topical action in gut  
Minimized toxicity  
Take home Rx  
No costly infusion

### THE LARGE MARKET OPPORTUNITY

Market opportunity for  
mAb therapeutics is  
greater than

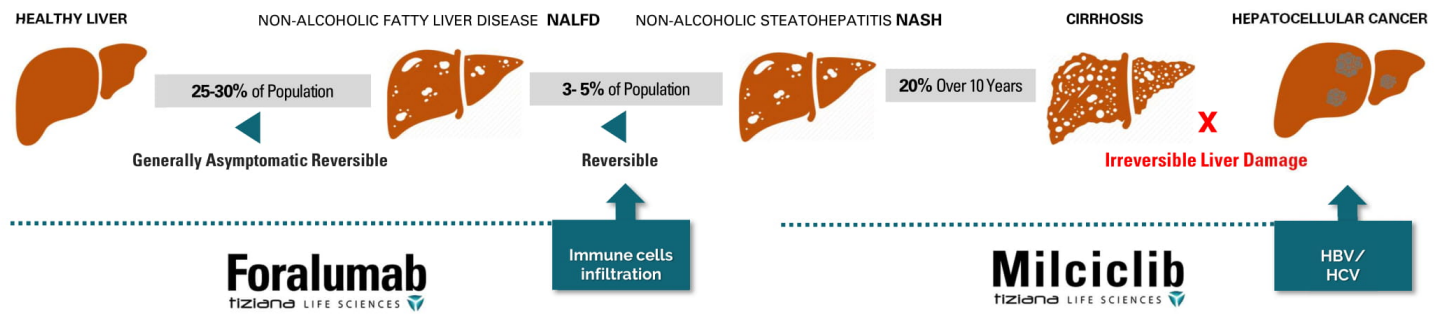
**\$86**  
**BILLION**



# THE MULTI BILLION DOLLAR MARKET FOR LIVER DISEASES AND CROHN'S DISEASE

EXCESSIVE FAT DEPOSITS LEAD TO LIVER INFLAMMATION

INFLAMMATORY AND FIBROTIC PROCESSES LEAD TO MALIGNANCY



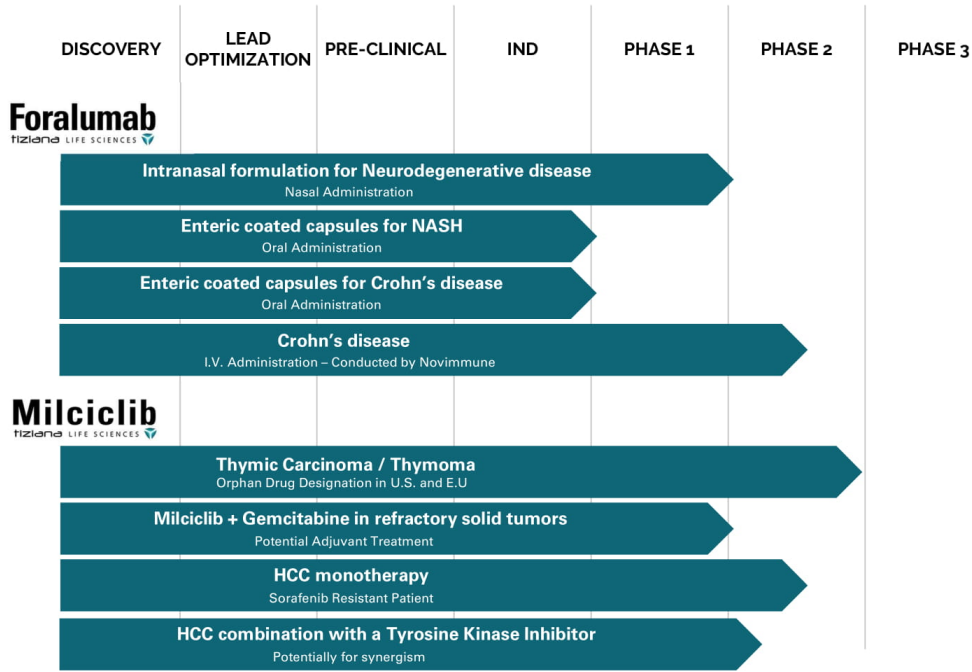
## Foralumab (Anti-CD3) for NASH and Crohn's Disease

- NASH global market - \$35 B/year
- Crohn's Disease market: \$10B /year by 2025
- Oral/nasal treatment is a novel, completely differentiated approach
- Strong IP on the 'Revolutionary' approach with significant market potential

## Milciclib for Liver Cancer

- HCC (\$1.5B /year by 2022): Medical need to have a safer and effective drug with higher responder rates
- Milciclib: An oral drug with completely differentiated MOA with long-term safety
- Superior safety profile

# DEVELOPMENT PIPELINE



From pipeline chart in F1

**Foralumab**  
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**BEGINNING PHASE 2**  
Nasal Trial

**Foralumab**  
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**PHASE 2a COMPLETED**  
I.V. Trial

**Milciclib**  
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**TWO PHASE 2 TRAILS COMPLETED**  
TC / T Oral

**Milciclib**  
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**PHASE 2a COMPLETED**  
HCC Oral Monotherapy

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**A BIOTECHNOLOGY PLATFORM ENABLING  
ORAL AND NASAL  
ADMINISTRATION OF FORALUMAB AND  
OTHER MONOCLONAL ANTIBODIES**



#### **NASAL ADMINISTRATION**

Phase 1 trial completed for related neurodegenerative diseases such as Progressive Multiple Sclerosis (Pro-MS). Top line data expected August 2019

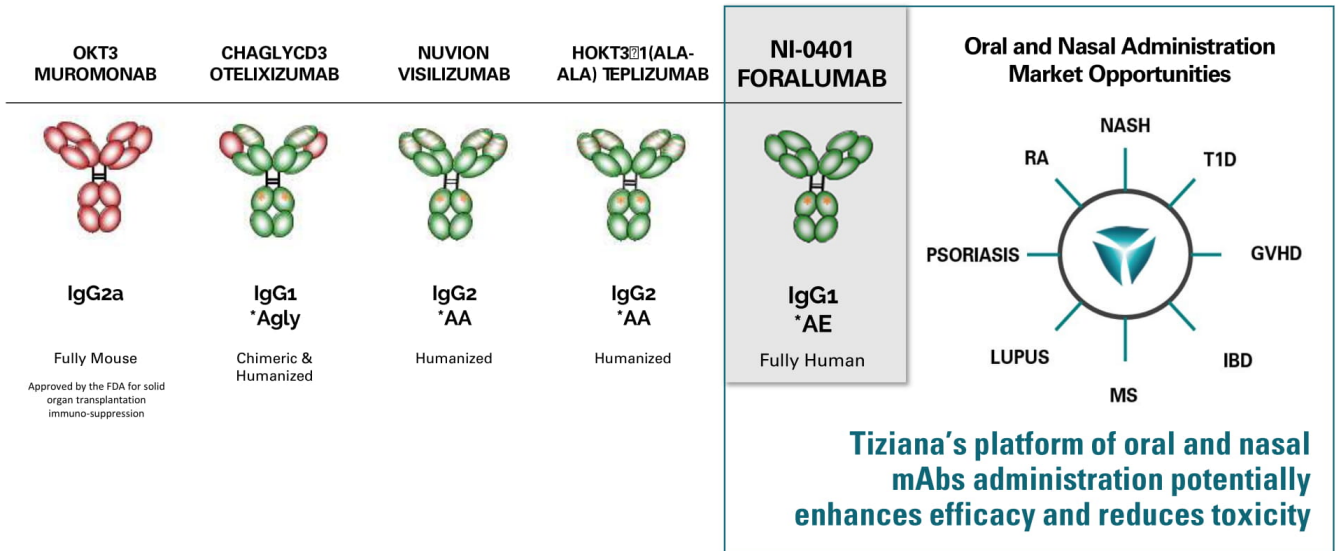


#### **ORAL ADMINISTRATION**

Phase 1 trial with enteric coated capsule formulation for oral administration (2H 2019) is expected to start shortly after meeting with FDA (Crohn's Disease Division)

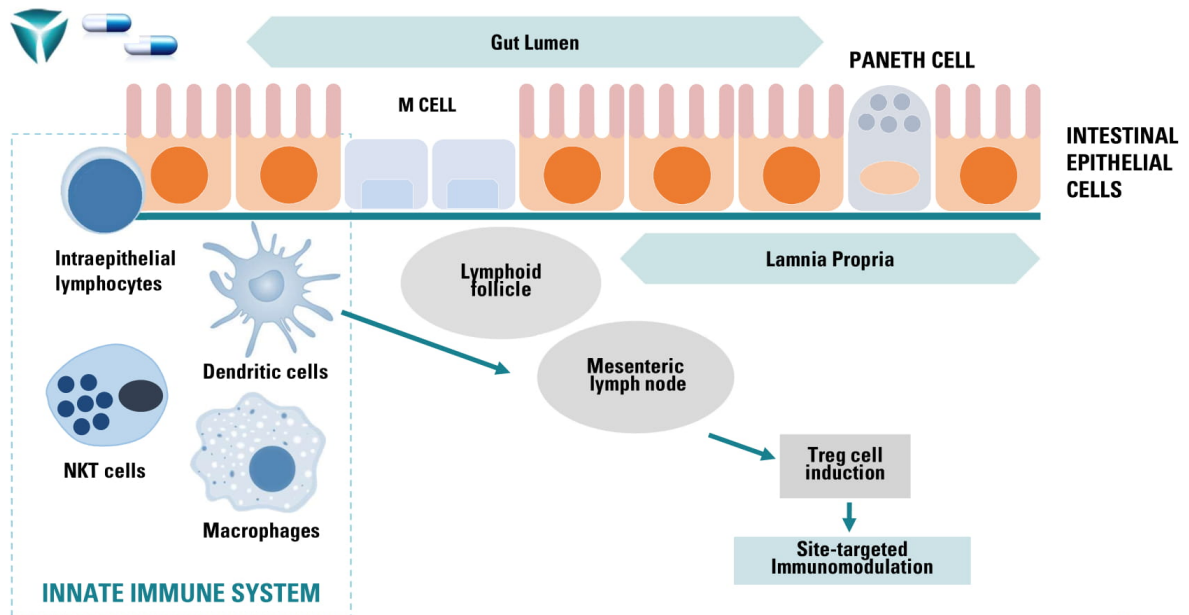
# THE ONLY FULLY HUMAN ANTI-CD3 MAB

CD3-SPECIFIC MONOCLONAL ANTIBODIES IN CLINICAL DEVELOPMENT



# HOW DOES OUR PLATFORM TECHNOLOGY WORK?

NOVEL APPROACH FOR SITE-TARGETED IMMUNOMODULATION



# ORAL AND NASAL FORMULATION PATENTS PENDING

## Nasal administration of **Foralumab** tizona LIFE SCIENCES

- ✓ Proof-of-concept demonstrated in animal studies
- ✓ Phase 1 study for neurodegenerative diseases at Brigham and Women's Hospital, Harvard Medical School; completed dosing, well-tolerated up to 250 µg
- ✓ Top line data expected August 2019
- ✓ In-licensed nasal delivery technology from Brigham and Women's Hospital, Harvard Medical School

## Patent covers **Foralumab** and other mAbs tizona LIFE SCIENCES

### ANTI-CD3 ANTIBODY FORMULATIONS

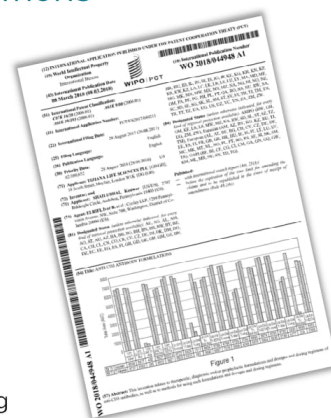
Applicant(s): Tizona Life Sciences PLC  
Inventor(s): SHAILUBHAI, Kunwar

**US Non-Provisional Patent Application  
No.:62/380,652, filed August 29, 2016**

**PCT Application  
PCT/US2017/049211, filed, Aug 29, 2017**

### Patent estate

- In-licensed exclusive license for composition of matter
- Composition of matter patent for oral formulation
- Additional patent applications pending
- Oral formulation technology applicable to other mAbs

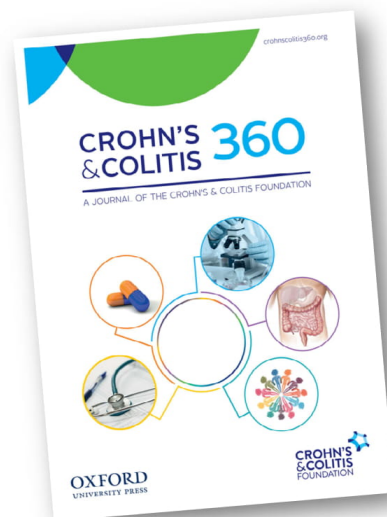




# FINDINGS SUPPORT TIZIANA'S ORAL PLATFORM

THIRD PARTY RESEARCHERS IN PEER-REVIEWED, **CROHN'S & COLITIS 360\***

- Determined the immunologic effects and safety of orally delivered anti-CD3 antibody in patients with moderate-to-severe ulcerative colitis (UC)
- Six subjects received oral OKT3



## KEY FINDINGS

1. The biologic **response to treatment with oral anti-CD3 were increased proliferation and anti-inflammatory gene expression profile** in peripheral blood mononuclear cells
2. 3 of 6 patients had a clinical response including one patient in clinical remission
3. Treatment was well-tolerated with **no serious treatment-related adverse events**

\* Boden, E. K., Canavan, J. B., Moran, C. J., McCann, K., Dunn, W. A., Farraye, F. A., Ananthakrishnan, A. N., Yajnik, V., Gandhi, R., Nguyen, D. D., Bhan, A. K., Weiner, H. L., Korzenik, J. R., Snapper, S. B. Immunologic alterations associated with oral delivery of anti-CD3 (OKT3) monoclonal antibodies in patients with moderate-to-severe ulcerative colitis. *Crohn's & Colitis 360* (2019). 183: 240-246.

# PROOF-OF-CONCEPT IN NASH PATIENTS

ORAL TREATMENT WITH MURINE ANTI-CD3 (OKT3) EFFECTIVE IN A PHASE 2 TRIAL WITH NASH<sup>1</sup>

STUDY DESIGN	SAFETY	IMMUNOLOGICAL	EFFICACY BIOMARKERS
<ul style="list-style-type: none"> <li>▪ 36 subjects with NASH and type II diabetes</li> <li>▪ Randomized, single-blinded, placebo-controlled</li> <li>▪ 9 per group, not powered for statistical significance</li> <li>▪ 0.2, 1.0, 5.0 mg or placebo daily for 30 days</li> <li>▪ Primary endpoints: safety and trends in immunomodulation</li> <li>▪ Secondary endpoint: indication or trend of efficacy through biomarkers</li> <li>▪ Follow up: Days 0, 14, 30, 60</li> <li>▪ Hadassah Medical Center, Jerusalem Israel</li> </ul>	<ul style="list-style-type: none"> <li>▪ Well tolerated by all patients in all groups</li> <li>▪ No systemic drug-related adverse events</li> <li>▪ No changes in vital signs, serum biochemistry and hematological parameters during treatment or follow-up periods (30-days post-treatment)</li> <li>▪ No changes in lymphocyte and CD+ cell counts</li> <li>▪ No changes in weight or BMI or HbA1C lipid GLP-1, or CRP levels in any of the groups</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increases in Treg markers consistent with induction of Tregs</li> <li>▪ Anti-inflammatory markers ↑</li> <li>▪ CD4+CD25+LAP+ Treg cells ,TGFβ ↑</li> </ul> <p><small>Sources:1) Lalazar, G, Mizrahi, M, Turgeman, I, Adar, T, Ya'Acov, A, B, Shabat, Y, ... ilan, Y. (2015) Oral Administration of OKT3 MAb to Patients with NASH, Promotes Regulatory T-cell Induction, and Alleviates Insulin Resistance: Results of a Phase IIa Blinded Placebo-Controlled Trial. Journal of Clinical Immunology, 35(4), 399-407.</small></p>	<ul style="list-style-type: none"> <li>▪ Positive trends, some of which were statistically significant</li> <li>▪ AST ↓ – liver enzyme indicating reduced liver inflammation</li> <li>▪ Glucose ↓ – favorable for subjects with type-2 diabetes</li> <li>▪ Insulin ↓ – favorable for subjects with type-2 diabetes</li> </ul>

# FORALUMAB IS FUNCTIONALLY EQUIVALENT TO OKT3

## Oral Treatment prevents skin xenograft rejection in mice with human immune systems

Mineko Ogura, Songyan Deng, Paula Preston-Hurlburt, Hideki Ogura, Kunwar Shailubhai, Chantal Kuhn, Howard L. Weiner, and Kevan C. Herold

*Clinical Immunol.* 2017, 183: 240-246

### KEY FINDINGS

1. Foralumab is as potent as OKT3
2. Treatment is **effective in humanized mice studies**
3. Mechanism of action is via **activation of Tregs that systemically circulate to elicit targeted immunomodulation**



# POTENTIAL TO TREAT TYPE 1 DIABETES

New England Journal of Medicine\* provides clinical evidence for the potential use of a humanized anti-CD3 mAb for treatment of type 1 diabetes

**Foralumab**  
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## KEY FINDINGS

1. Teplizumab (humanized OKT3), administered intravenously, **significantly slowed progression to clinical Type 1 diabetes, with a median delay in the diagnosis of diabetes of 2 years**
2. At the end of the trial, **57% of subjects treated with Teplizumab showed slowed progression to development of Type 1 diabetes, while 72% of the placebo-treated subjects progressed to clinical diabetes**



\*K Herold, B Bundy, SA Long, J Bluestone, L Dimeglio, M Dufort, S Gitelman, P Gottlieb, J Krischer, P Linsley, J Marks, W Moore, A Moran, H Rodriguez, W Russell, D Schatz, J Skyler, E Tsalikian, D Wherrett, A-G Ziegler and C Greenbaum. "An Anti-CD3 Antibody, Teplizumab, in Relatives at Risk for Type 1 Diabetes." epub. NEJM.org June 9 2019

# PROGRESS AND RECENT EVENTS

## Foralumab

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- Beginning Phase 2 trial
- Advancing the clinical development of orally-administered Foralumab for the treatment of NASH and Crohn's disease
- Proof-of-concept for oral administration with mAbs was provided by three independent third-party publications

1 July 2019

Independent Third-Party Article in *New England Journal of Medicine* reports on Intravenous Treatment with a Humanized Anti-CD3 mAb showing delays in progression of Type 1 Diabetes

A recently published study in The New England Journal of Medicine titled, "An Anti-CD3 Antibody, Teplizumab, in Relatives at Risk for Type 1 Diabetes," demonstrates potential use of an anti-CD3 mAb in the prevention or treatment of Type 1 diabetes. Teplizumab is being developed by Provention Bio. The published study was funded by the National Institute of Health and others and was conducted by investigators at numerous institutions in the field of immunology and pediatrics including Yale University and Vanderbilt University.

# PROGRESS AND RECENT EVENTS

## Milciclib

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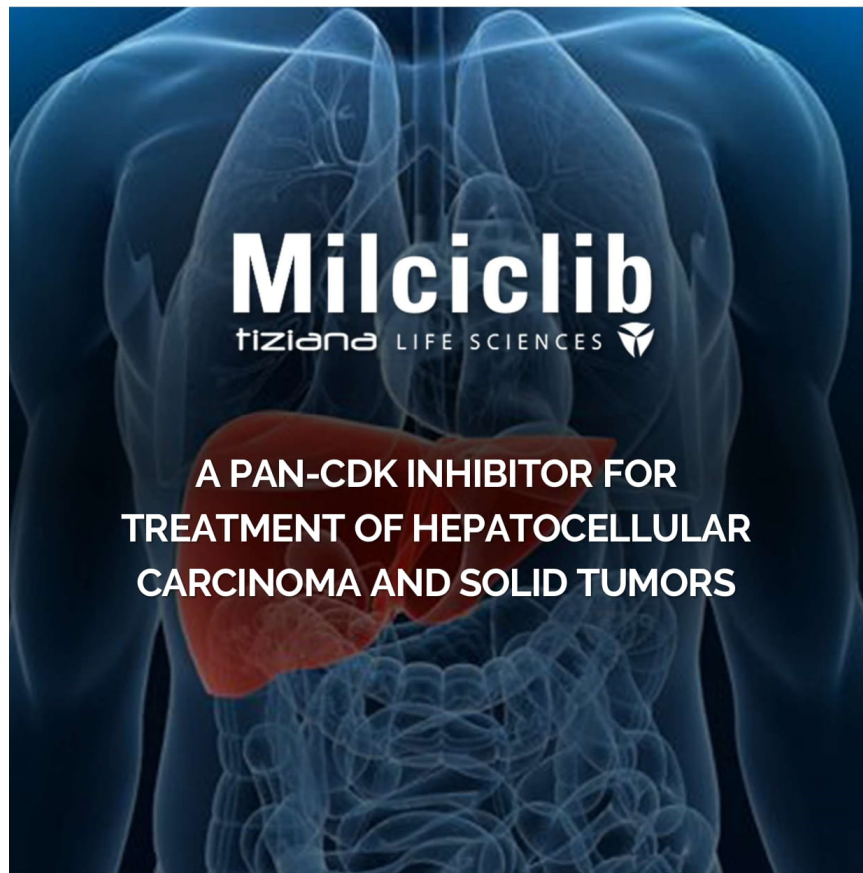
- **Beginning Phase 2b**
- **Progressing the clinical development** and obtaining regulatory approval for Milciclib, as a monotherapy in HCC and as a combination therapy for the treatment of refractory solid tumors (cancers which are non-responsive or become resistant to treatment)
- **Efficacy and exploratory endpoint results** from Phase 2a monotherapy trial available in September 2019

**22 July 2019**

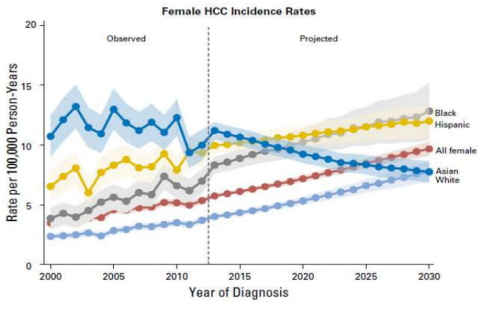
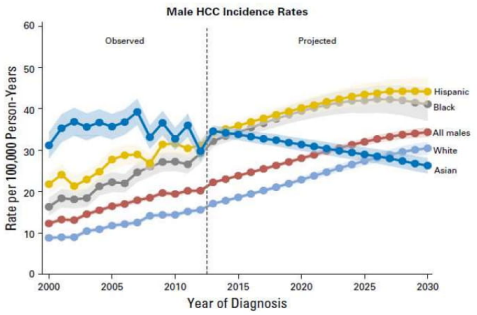
### Tiziana Reports Phase 2a Clinical Data with Milciclib Monotherapy in Sorafenib-refractory or -intolerant patients with unresectable or metastatic Hepatocellular Carcinoma

- Milciclib was well tolerated and no drug related deaths were reported
- 28 out of 31 treated patients were evaluable, with 14 patients completing the 6-month study duration
- 9 patients continued treatment under compassionate use, of which 5 are currently continuing with treatment





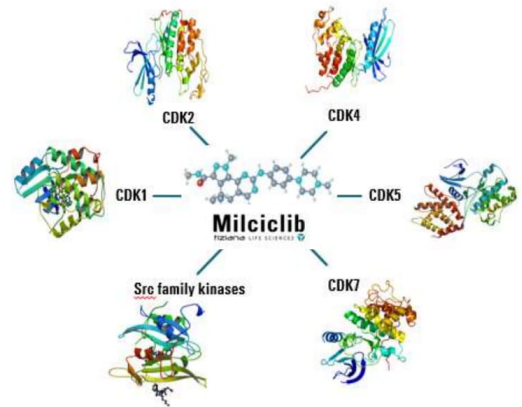
**Incidence of HCC is steadily increasing in males and females and subpopulations in US**



Source: Petrick et al. J. Clin. Onc 34 (15) (2016) pg 1787-1795

## SMALL MOLECULE PAN-CDK INHIBITOR

- Orally-bioavailable small molecule with potent anti-tumor activity in a wide range of animal models
- Inhibitor of kinases associated with cancer cell growth including CDK1, CDK2, CDK4, CDK5, CDK7 and src-family kinases
- Inhibits signaling pathways for hepato-carcinogenesis
- Well tolerated in 316 patients
- Improved toxicity profile over the current standard of care anticipated



**A drug with completely differentiated MOA and long-term safety**

# CLINICAL DATA FROM MILCICLIB

## PHASE 2A TRIAL IN SORAFENIB-RESISTANT HCC PATIENTS

**Trial design:** Oral administration (100 mg/day). Total patients 30 to be enrolled. Duration 6 months

**Primary end point:** safety

**Secondary end points:** PFS, ORR & TTP

**Exploratory:** AFP and miRNA profiling

**Compassionate use:** Upon request of patients with EC approval

**Trial complete:** Data from 28 out of 31 evaluable sorafenib-resistant HCC patients

- 14 patients completed treatment as per protocol
- Nine approved for compassionate use. Four patients completed 9, 11, 13 and 16 months, respectively. Five patients continuing with the treatment at 8,9,9,9 and 11 months, respectively
- No drug related deaths in the trial
- Treatment was well-tolerated
- Adverse events were manageable
- MRI imaging and micro RNA profiling data available in September 2019

## THYMIC CARCINOMA AND THYMOMA UPDATES

- Two Phase 2 trials with Milciclib in US, Italy and France
  - Trial 006: Thymic carcinoma and Thymoma mixed population (72 patients)
  - Trial 007: Thymic carcinoma and Thymoma mixed population (30 patients)
- Rare cancers with very few cases: Orphan Disease Indications
- Positive clinical data
- **Primary endpoint (progression free survival) and secondary endpoint (overall survival) met in both trials separately**
- Thymic carcinoma is an aggressive metastatic cancer and it has no approved therapy
- Milciclib as a single agent met primary as well as secondary endpoints in thymic carcinoma in both trials
- **Under compassionate use, few patients continued the treatment for over five years**
- Seeking guidance from FDA/EMA regarding conditional marketing approval

# MILCICLIB OVERCOMES DRUG RESISTANCE

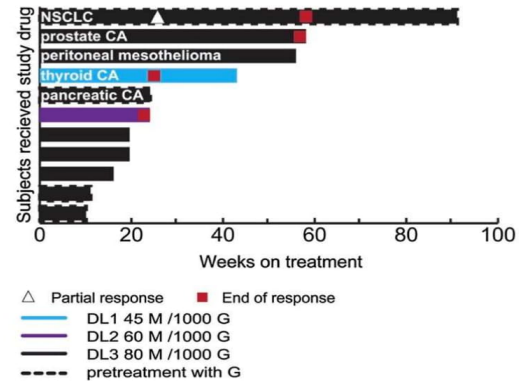
## PATIENTS RAPIDLY ACQUIRE RESISTANCE TOWARDS CHEMOTHERAPIES

### KEY FINDINGS

1. Milciclib **well-tolerated with manageable side effects** with refractory solid tumors
2. Oral treatment **in combination with gemcitabine demonstrated clinical activity** in patients who were non-responder to existing chemotherapeutic drugs
3. Recommended Phase 2 dose (RPD) **found to be 150 mg/day (7 day off/7day on cycle)**
4. Overall **response rate was 36%**
5. Results **suggest further evaluation in other solid cancers either as monotherapy or combo-therapy**

### Phase 1 Dose-Escalation Study of Milciclib in Combination with Gemcitabine in Patients with Refractory Solid Tumors\*

Sandrine Aspeslagh<sup>1</sup> · Kunwar Shailubhai<sup>2</sup> · Rastlav Bahleda<sup>1</sup> · Anas Gazzah<sup>1</sup> ·  
Andréa Varga<sup>3</sup> · Antoine Holthebecque<sup>1</sup> · Christophe Massard<sup>1</sup> · Anna Spreafico<sup>3</sup> ·  
Michele Reni<sup>3</sup> · Jean-Charles Soria<sup>1</sup>



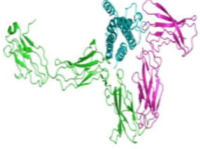
Swimmerplot showing treatment duration. Tumor type was indicated for patients having a prolonged stable disease or a partial response. M Milciclib; G gemcitabine.

\* Cancer Chemotherapy and Pharmacology, June 2017, 79(6), 1257-1265

# PRECLINICAL PIPELINE

A FULLY HUMAN ANTI IL-6 RECEPTOR MAB

TZLS-501



**Fully human anti-interleukin-6 receptor (IL-6R) monoclonal antibody (mAb) to treat inflammatory disease**

MECHANISM	INDICATIONS	OPPORTUNITY	COMPETITIVE EDGE	IP/OWNERSHIP
<ul style="list-style-type: none"><li>Interleukin-6 (IL-6) is a potent cytokine regulating cell growth, differentiation and immune responses.</li><li>Excessive production of IL-6 and its receptor IL-6R are key drivers of chronic inflammation and inflammatory disease</li></ul>	<ul style="list-style-type: none"><li>Multiple Myeloma</li><li>Could be used in combination with Foralumab for NASH and other autoimmune and inflammatory diseases such as rheumatoid arthritis</li></ul>	<ul style="list-style-type: none"><li>Anticipated to exert synergistic effect with Foralumab for inflammatory diseases</li><li>&gt;\$35 billion market</li></ul>	<ul style="list-style-type: none"><li>Differs from other anti-IL-6R mAb's (e.g. tocilizumab), by acting not only on membrane-bound IL-6R, but also on soluble IL-6R, and is also able to deplete circulating levels of IL-6 in blood</li></ul>	<ul style="list-style-type: none"><li>Exclusive license from Novimmune (NI-1201)</li><li>Method of use in combination with anti-CD3 patent pending</li></ul>







GROWTH OPPORTUNITY



# INTELLECTUAL PROPERTY PORTFOLIO

FAMILY	SUBJECT	PRIORITY	STATUS	EXPIRES	JURISDICTION
<b>Foralumab</b> <small>tiziana LIFE SCIENCES</small> <b>TZLS-401</b>	Methods of Use (Autoimmune or Inflammatory diseases and disorders)	2004	Issued	2025	Australia, Canada, China, Hong Kong, Israel, Japan, Mexico, Norway, Singapore, South Africa, Ukraine, Armenia, Austria, Azerbaijan, Belgium, Belarus, Switzerland, Germany, Denmark, Spain, France, United Kingdom, Ireland, Italy, Kyrgyzstan, Kazakhstan, Luxembourg, Moldova, Netherlands, Portugal, Russian Federation, Sweden, Tajikistan, Turkmenistan,
	Composition and methods of use	2004	Issued/ Pending	2025	US, Armenia, Australia, Austria, Azerbaijan, Belarus, Canada, China, Denmark, France, Germany, Hong Kong, India, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Mexico, Moldova, Netherlands, Norway, Republic of Korea, Russian Federation, Singapore, South Africa, Spain, Switzerland, Tajikistan, Turkmenistan, and Ukraine Pending: Brazil, Japan (divisional), Singapore (divisional), US (divisional)
	Methods of Use (In combination with anti-IL-6/IL-6R antibodies)	2011	Pending	2032	US
	Formulations and dosing regimen	2016	Pending	2037	US, Australia, Canada, China, Europe, Israel, Japan
	Methods of Use (CNS disorders)	2017	Pending	2038	PCT
Methods of Use (gastrointestinal/autoimmune/inflammatory)	2018	Pending	2039	Provisional	
<b>Milciclib</b> <small>tiziana LIFE SCIENCES</small> <b>TZLS-201</b>	Composition of matter, methods of use, process of manufacturing	2003	Issued/ Pending	2024	US, Europe, Eurasia, Africa, Algeria, Antigua & Barbuda, Argentina, Australia, Barbados, Bosnia & Herzegovina, Brazil, Canada, Colombia, Costa Rica, Croatia, Cuba, Ecuador, Egypt, Georgia, Iceland, India, Indonesia, Israel, Japan, Korea, Kosovo, Malaysia, Mexico, Mongolia, Montenegro, New Zealand, Nicaragua, Norway, Pakistan, Philippines, Serbia, Singapore, South Africa, Sri Lanka, Taiwan, Thailand, Trinidad & Tobago, Tunisia, Ukraine, Uzbekistan, Venezuela, Vietnam Pending: Several in US and other countries
	Methods of use (multiple indications)	2008; 2009	Issued	2029; 2030	US, EU, China, Hong Kong, Japan
	Methods of use (combination therapies with cytotoxics)	2008; 2009	Issued	2029; 2030	US, EU, China, Hong Kong, Japan
	Compositions of related entities, formulations and methods of treatment	2009	Issued	2030	US, EU, China, Hong Kong, Japan
	Methods of use (combination therapies with therapeutic antibodies)	2006	Issued	2027	US, EU, China, Japan
	Formulations of Milciclib and therapeutic combinations of the same for use in the treatment of cancer	2017	Pending	2038	US, PCT
<b>Anti IL-6/IL-6R Antibody</b> <small>tiziana LIFE SCIENCES</small> <b>TZLS-501</b>	Composition of Matter and Methods of use	2009	Issued/ Pending	2029	US, Austria, Australia, Belgium, Canada, China, Denmark, France, Germany, Ireland, Italy, Japan Luxembourg, Mexico, Netherland, Spain, Sweden, Switzerland and UK . Pending: US (divisional), Japan (divisional), India

# CATALYSTS

PRODUCT	ACTION/OBJECTIVE	DATE
 <b>Foralumab</b> tiziana LIFE SCIENCES	Report Phase 1 Nasal Dosing in Healthy Volunteers (Safety, Tolerability and Biomarkers of Immunomodulation)	<b>August 2019</b>
 <b>Foralumab</b> tiziana LIFE SCIENCES	Initiate Phase 1 Oral Dosing of Foralumab in Healthy Volunteers	<b>2H 2019</b>
 <b>Milciclib</b> tiziana LIFE SCIENCES	Report Top Line Safety, Efficacy and Exploratory End Point Data from Phase 2a Monotherapy Trial	<b>2H 2019</b>
 <b>Milciclib</b> tiziana LIFE SCIENCES	Initiate Phase 2b Liver Cancer Study of Milciclib in Combination with a TKI	<b>2H 2019</b>
 <b>Foralumab</b> tiziana LIFE SCIENCES	Report Phase 1 Oral Dosing of Foralumab in Healthy Volunteers (Safety, Tolerability and Biomarkers of Anti-inflammation)	<b>1H 2020</b>
 <b>Foralumab</b> tiziana LIFE SCIENCES	Initiate Phase 2 in Crohn's disease and NASH with Oral Foralumab	<b>2H 2020</b>

**GROWTH OBJECTIVES**

# PLANNED USE OF PROCEEDS

OBJECTIVE	CAPITAL ALLOCATION
<b>Milciclib Program</b> Advance the Clinical Development - Commence Phase 2b Clinical Trial	<b>~\$4.0 Million</b>
<b>Foralumab Program</b> Complete Phase 1 Oral Administration Clinical Trial - Healthy Volunteers Commence Phase 2 Nasal Administration Clinical Trial - MS Patients	<b>~\$3.0 Million</b> \$1.0 Million \$2.0 Million
<b>Other R&amp;D Programs, Working Capital</b>	<b>~\$3.0 Million</b>
<b>TOTAL</b>	<b>~\$10.0 Million</b>

# CAPITAL STRUCTURE

	ADS EQUIVALENT*
<b>Ordinary Issued Shares</b>	<b>13,646,382</b>
<b>Warrants</b> (WAEP : £11.60)	<b>361,790</b>
<b>Options</b> (WAEP : £16.51)	<b>1,713,740</b>
<b>Fully Diluted Shares</b>	<b>15,721,912</b>

\*Information prepared as of July 24, 2019  
1 ADS represents 10 ordinary shares



An Innovative Platform in Oral and Nasal Antibody Administration

A Novel Approach for Treatment of Hepatocellular Carcinoma

**Foralumab**  
tiziana LIFE SCIENCES

**Milciclib**  
tiziana LIFE SCIENCES

**TLSA: NASDAQ** **TILS: AIM**

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