



**tiziana**  
LIFE SCIENCES

**An Innovative Platform in Oral, Nasal and Inhalation  
for Monoclonal Antibody Administration**

**Proprietary inhalation delivery of anti-IL-6R mAb for  
COVID-19 treatment**

**Advanced clinical programs in Crohn's Disease,  
progressive Multiple Sclerosis, and Hepatocellular  
Carcinoma**

**July 2020  
Corporate Presentation**

<https://www.tizianalifesciences.com/>

NASDAQ: **TLSA**

AIM: **TILS**

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# KEY MEMBERS OF EXECUTIVE TEAM



**Kunwar Shailubhai PhD,  
MBA  
CEO & CSO  
Executive Director**

- Co-founder , EVP & CSO of Synergy Pharmaceuticals, NASDAQ: SGYP
- Inventor of oral formulation technology
- The pioneer of GC-C agonist technology
- Inventor of TRULANCE® approved for Chronic constipation and IBS-C
- VP, Callisto Pharmaceuticals
- Group Leader, Monsanto Co.



**Gabriele Cerrone, MBA  
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, US.

## Key Strengths of the Management Team

- Successful track record in biotechnology ‘Bench to Market’
- 3 team members independently brought drugs to market
- Proven industry leadership
- Strong entrepreneurial success in Biotechnology deals



**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



**John Brancaccio  
Non-Executive Director**

- Over 35 years financial experience in pharma/biotech/medical devices
- Management and SEC reporting
- Private and public fundraising experience
- Greater than 15 years’ experience with multiple public companies

# SCIENTIFIC ADVISORY COMMITTEE

## 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

## Angelo Sangiovanni, MD



- Adjunct Professor of Gastroenterology at the University of Milan
- Leader in liver disease and gastroenterology
- Awarded Best Scientific Publication in clinical Hepatology in Italy

## 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

## Fabio Piscaglia, MD



- Associate Professor, Medical and Surgical Sciences at the University of Bologna
- Leader in liver diseases and transplantation
- 2017 Winner of a National Institute of Health (NIH) of United States of America grant

## 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

## Erica Villa, MD



- Professor and Chief GI Unit
- Chairman of the Department of Internal Medicine
- Universitaria di Modena, Policlinico, Modena, Italy
- Leader in Clinical Hepatology and Translational Medicine

## 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

# INVESTMENT HIGHLIGHTS

- **Transformational platform technologies:** Proprietary oral, nasal and inhaled formulation technologies to transform *immunotherapies with Monoclonal Antibodies ('mAbs')* currently administered intravenously
- **Oral immunotherapy for Crohn's Disease (CD):** Phase 2 clinical study with orally administered Foralumab, a fully human anti-CD3 mAb: *Anticipated completion date Q3/Q4, 2021*
- **Proprietary Inhalation formulation of fully human anti-IL6 receptor mAb for direct delivery in lungs for treatment of COVID-19 patients:** Lungs are the primary site for COVID-19 infection and progression. Thus, direct delivery of anti-IL6R (TZLS-501) mAb to lungs is expected to provide immediate relief to COVID-19 patients: *Anticipated IND submission date Q1, 2021*
- **Nasal treatment for progressive multiple sclerosis (pro-MS):** Phase 2 clinical study with nasally administered Foralumab: *Anticipated completion date Q2, 2021.*
- **Innovative Approach:** Nasally administered Foralumab upregulates T regulatory cells (Tregs) that are capable of crossing '*Blood Brain Barrier*' to suppress inflammation in brain commonly associated with Neurodegenerative diseases such as, *Multiple Sclerosis, Alzheimer and Lupus (systemic lupus erythematosus)*
- **Broad-spectrum treatment for hepatocellular carcinoma (HCC):** Milciclib, a pan-CDK (cyclin dependent kinase) inhibitor, successfully completed phase 2 clinical trial in advanced HCC patients
- **Orphan Drug Designation for Milciclib:** Granted in US and EU for treatment of thymic carcinoma/thymoma (TC/T)

## Foralumab

**Oral Trial:** FDA approved IND

Phase 1 oral trial completed

Phase 2 oral in CD by Q3/Q4, 2021

**Nasal Trial:** Phase 2 starting shortly

Phase 1 trial completed

Phase 2 data in pro-MS by Q2, 2021

## TZLS-501 (Anti-IL6R)

**Inhalant Trial:** Preclinical

Trial to commence investigating direct delivery of anti-IL6R mAb to the lungs using a portable inhaler

## Milciclib

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

**Phase 2a** in sorafenib-resistant HCC patients completed

Milciclib seems to outperform Standard of care

# A REVOLUTIONARY PLATFORM

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

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



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

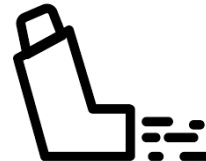
**tiziana**  
platform enables...



Antibodies (mAbs) reformulated for oral administration



Antibodies (mAbs) reformulated for nasal administration



TZLS- 501 Anti- IL6R- delivery of anti-IL-6R mAb to the lungs using a portable inhaler



## THE LARGE MARKET OPPORTUNITY

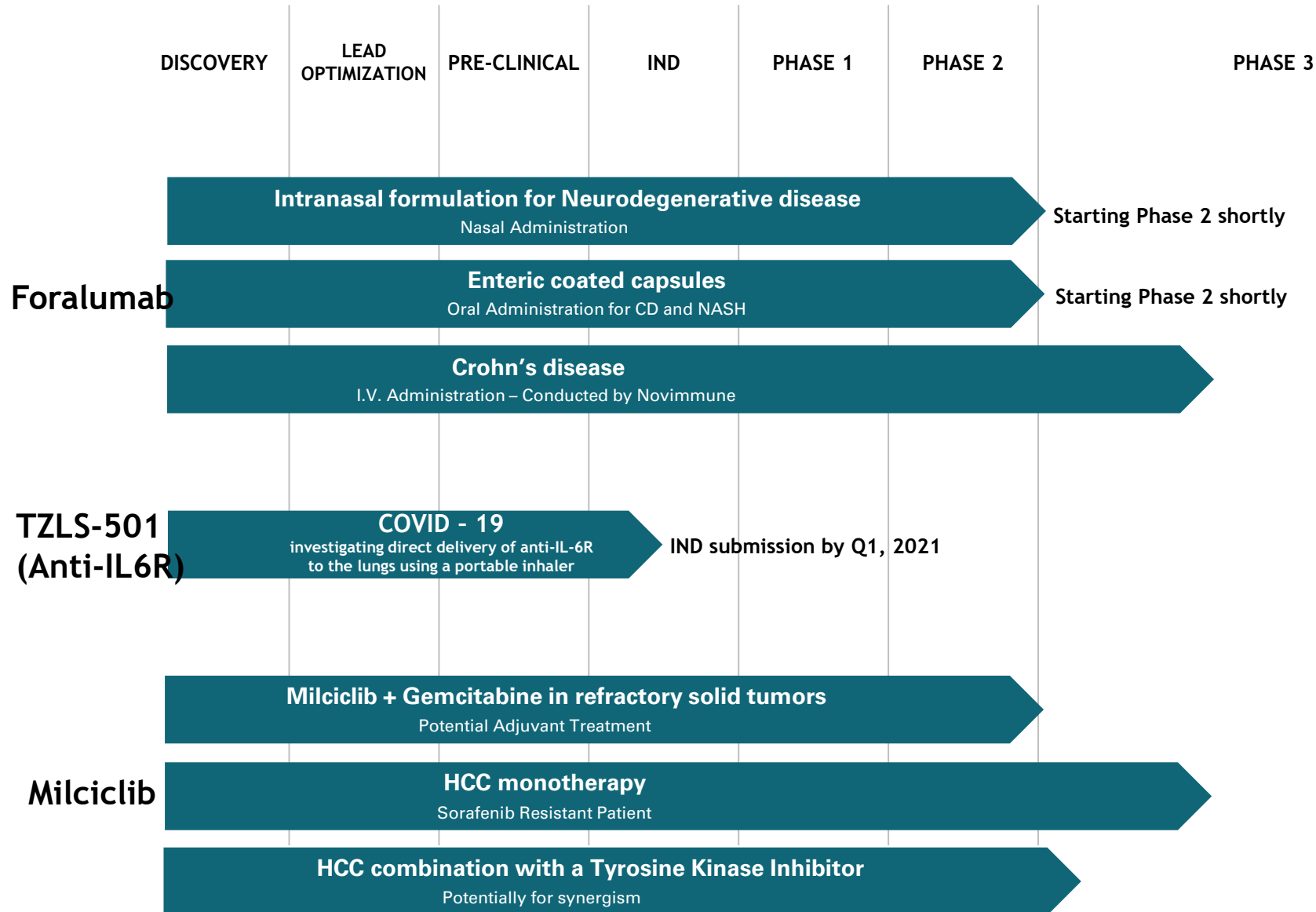
Market opportunity for mAb therapeutics is greater than

**\$ 110  
BILLION**

## PATIENT & PROVIDER BENEFITS

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

# DEVELOPMENT PIPELINE



## Foralumab

**PHASE 2 TO BEGIN**  
Nasal Trial  
Pro-MS

**PHASE 2 TO BEGIN**  
Oral trial in  
Crohn's Disease

## TZLS-501 (Anti-IL6R)

**PRECLINICAL STUDIES**  
ANTI-IL6R  
INHALER

## Milciclib

**PHASE 2a COMPLETE**  
HCC Oral  
Monotherapy



**A BIOTECHNOLOGY PLATFORM ENABLING  
ORAL, NASAL & INHALATION  
ADMINISTRATION OF MONOCLONAL  
ANTIBODIES**



## **ORAL ADMINISTRATION**

Successfully completed Phase 1 trial with orally administered Foralumab

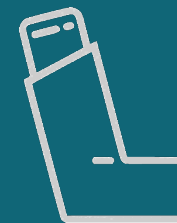
Phase 2 trial in Crohn's Disease to start shortly



## **NASAL ADMINISTRATION**

Phase 1 trial completed for related neurodegenerative diseases such as Progressive Multiple Sclerosis (Pro-MS)

Phase 2 trial in Pro-MS to start shortly.



## **INHALATION ADMINISTRATION**

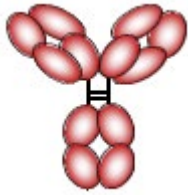
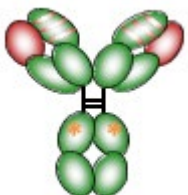
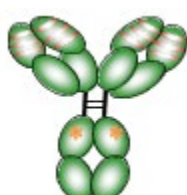
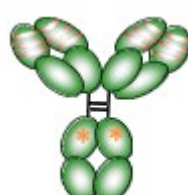
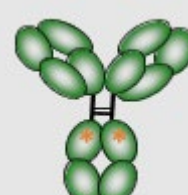
Preclinical Studies Ongoing

Trial to commence investigating direct delivery of anti-IL6R mAb to the lungs using a portable inhaler

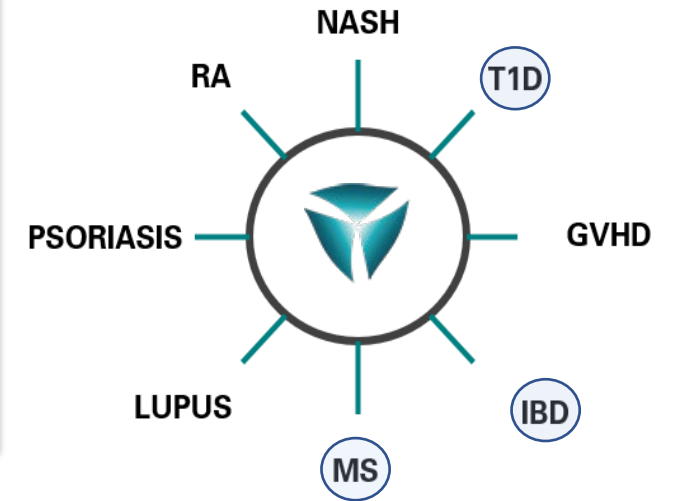


# THE ONLY FULLY HUMAN ANTI-CD3 MAB IN CLINICAL TRIALS

## CD3-SPECIFIC MONOCLONAL ANTIBODIES IN CLINICAL DEVELOPMENT

OKT3 MUROMONAB	CHAGLYCD3 OTELIXIZUMAB	NUVION VISILIZUMAB	HOKT3 $\gamma$ 1(ALA- ALA) TEPLIZUMAB	FORALUMAB
				
IgG2a	IgG1 *Agly	IgG2 *AA	IgG2 *AA	IgG1 *AE
Fully Mouse	Chimeric & Humanized	Humanized	Humanized	Fully Human
Approved by the FDA for solid organ transplantation immuno-suppression				

### Oral and Nasal Administration Market Opportunities



Patent application filed on use of Foralumab to enhance CAR-T success

# ORAL AND NASAL FORMULATION PATENTS PENDING

## Nasal administration of Foralumab

- ✓ Proof-of-concept demonstrated in animal studies
- ✓ Phase 1 study for neurodegenerative diseases at Brigham and Women's Hospital, Harvard Medical School; completed and well-tolerated up to 250 µg
- ✓ Positive Top line data received August 2019, CSR in preparation
- ✓ In-licensed nasal delivery technology from Brigham and Women's Hospital, Harvard Medical School
- ✓ **Targets: Pro-MS and Alzheimer**

## Patent covers Foralumab and other mAbs

### ANTI-CD3 ANTIBODY FORMULATIONS

Applicant(s): Tiziana 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

- Exclusive license for composition of matter
- Composition of matter patent for oral and nasal formulation
- Additional patent applications pending
- Oral formulation technology applicable to other mAbs

**Targets: Crohn's Disease and NASH**

GRANTED



# PHASE 1 CLINICAL DATA WITH NASALLY ADMINISTERED FORALUMAB

- Phase 1 trial conducted at Brigham and Women's Hospital completed July 2019
- Dose-ranging, double-blind, placebo-controlled study in healthy subjects
- Foralumab was administered nasally at 10, 50 and 250 µg per day, consecutively for 5 days using a hand-held spray device
- Each dose group consisted of 6 active and 3 placebo

## KEY FINDINGS

- Foralumab was well-tolerated with no drug-related toxicities
- Immunology marker analysis indicated, that 50-µg dose stimulated the anti-inflammatory cytokine IL-10 and suppressed the pro-inflammatory cytokine IFN-γ
- Results suggest stimulation of T regs needed for clinical benefits

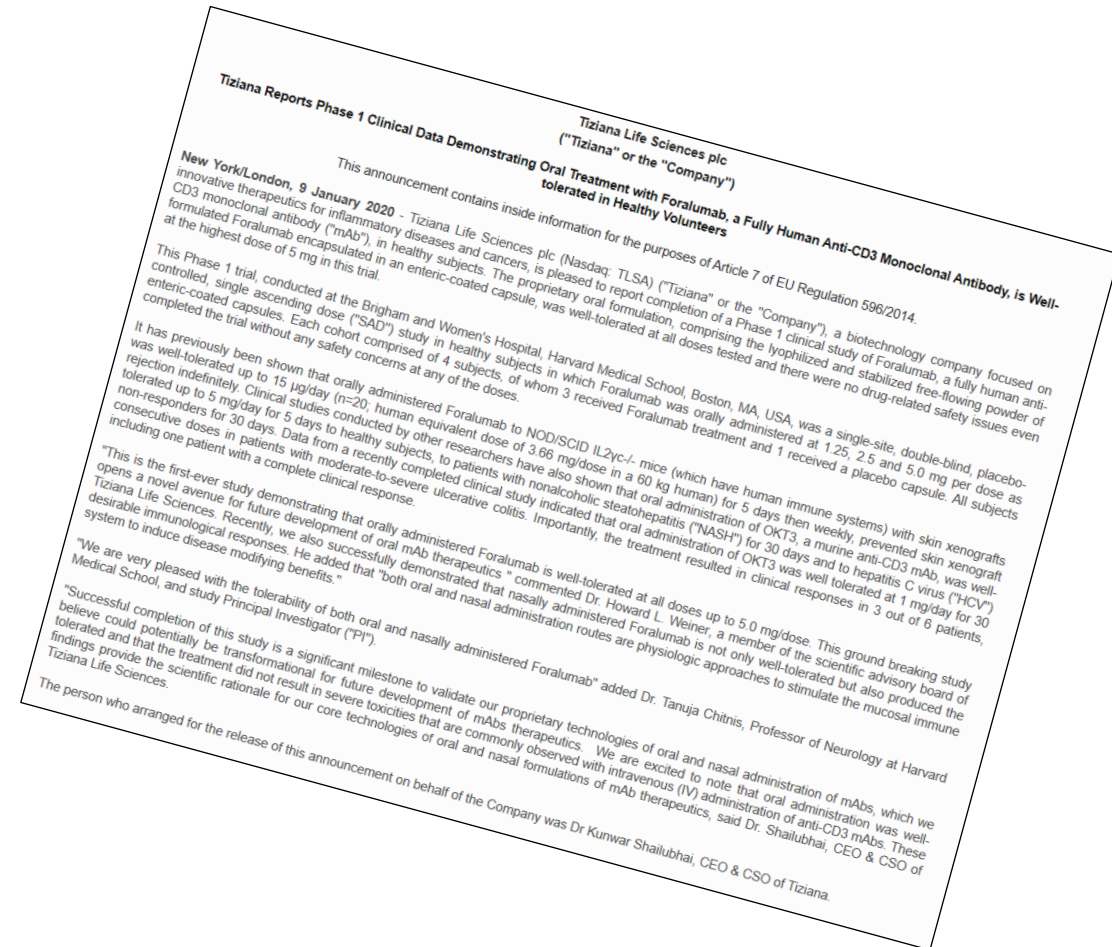


# PHASE 1 CLINICAL DATA WITH ORALLY ADMINISTERED FORALUMAB

- Phase 1 trial conducted at Brigham and Women's Hospital completed December 2019
- Single ascending dose, double-blind, placebo-controlled study in healthy subjects
- Foralumab administered at 1.25, 2.5 and 5.0 mg/dose as stabilized powder formulation in enteric-coated capsules
- No apparent toxicity up to 5 mg

## KEY FINDINGS

1. Well-tolerated at all doses tested
2. No drug-related safety issues observed
3. Toxicities associated with IV administration of anti-CD3 mAbs not observed

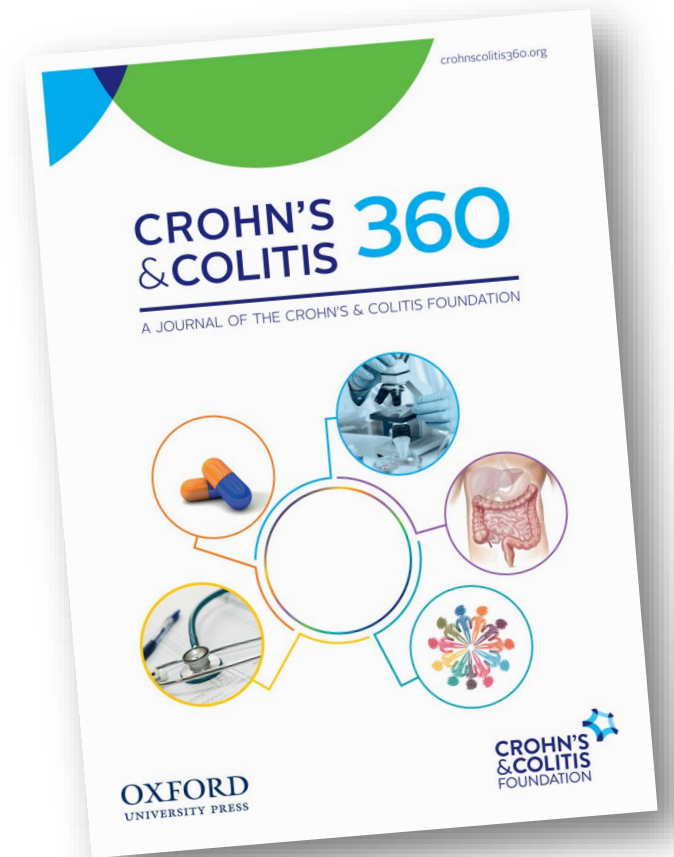


# THE CONCEPT FOR ORAL ADMINISTRATION WITH ANTI-CD3 MAB IS VALIDATED WITH CLINICAL DATA IN ULCERATIVE COLITIS

- Conducted by Dr. Scott Snapper at Harvard Medical School
- 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>	<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>

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.

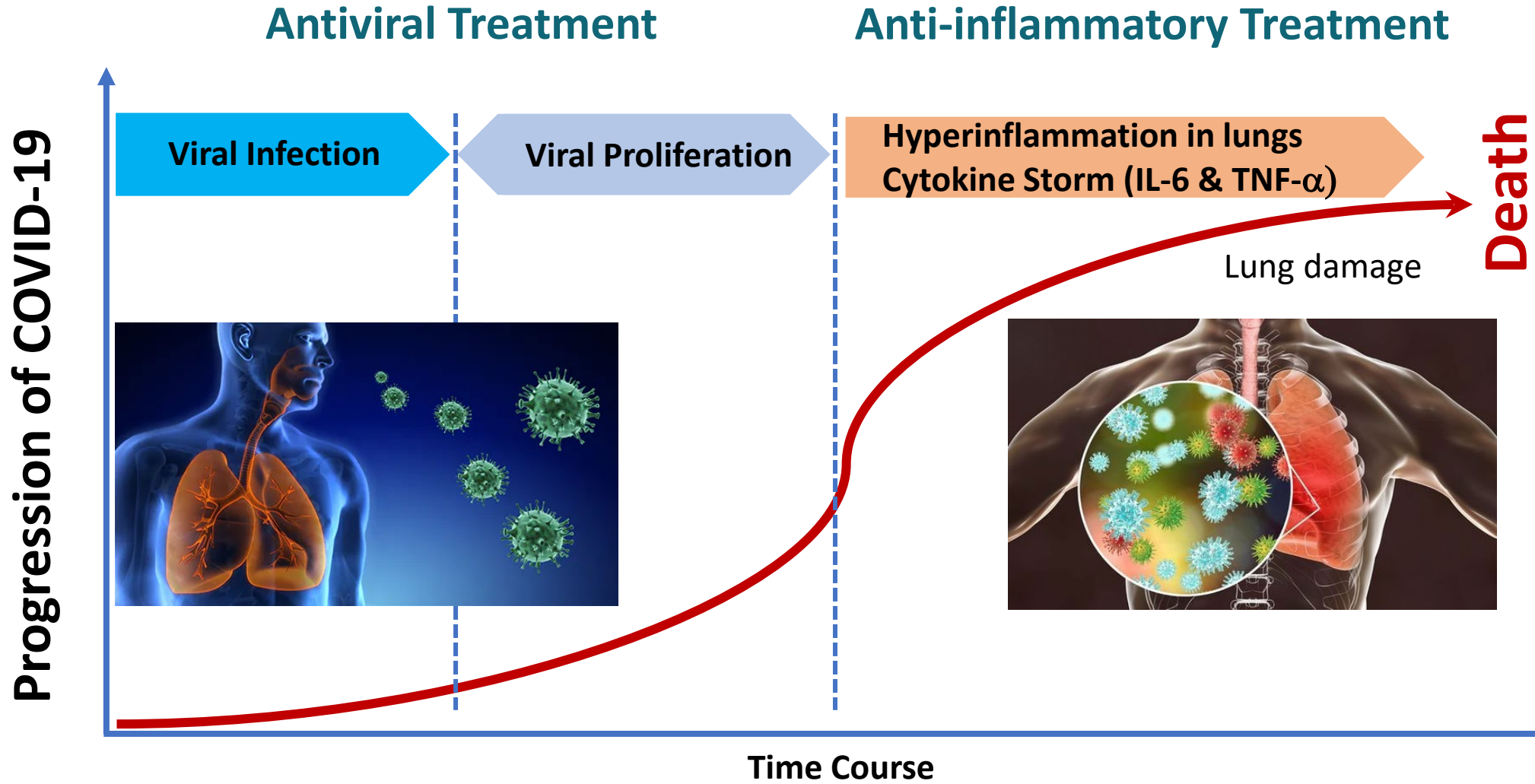
# PATENT APPLICATION FILED FOR COMPOSITION AND METHOD OF USE OF ANTI-IL-6R MONOCLONAL ANTIBODIES FOR TREATMENT OF COVID-19

Applicant: Tiziana Life Sciences PLC

- Excessive levels of circulating IL6 is the major cause of COVID-19 progression. Thus depletion of circulating IL6 is an attractive approach to provide immediate relief to patients with COVID-19
- TZLS-501 (formerly NI-1201) a fully human anti-IL-6 receptor mAb was acquired from Novimmune in 2017 and currently under license from BMS
- Binds to both the membrane-bound and soluble forms of the IL6R and depletes circulating levels of the IL-6 in the blood
- Anti IL-6R mAb Patent application covers
  - ✓ Use of antibody for immediate treatment of COVID-19 patient
  - ✓ Delivery via aerosol formulation by an inhaler or nebulizer, which can be easy to use for children and elderly people
  - ✓ Administration as aerosol formulation by an inhaler/nebulizer either alone or in combination with intravenous administration



# THERAPEUTIC OPTIONS DURING PROGRESSION OF COVID-19



Our patent covers the inhalation delivery anti-IL-6R mAb alone or in combination with Remdesivir

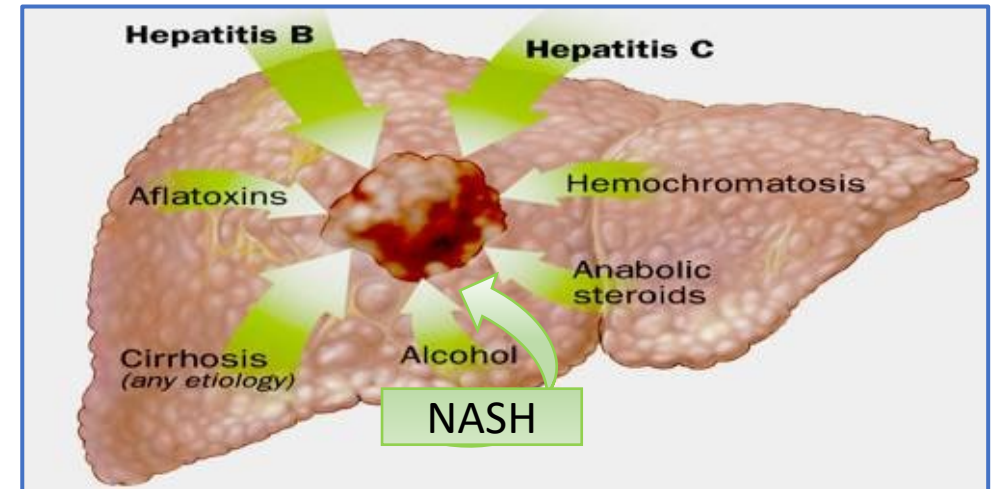


# Milciclib

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A PAN-CDK INHIBITOR FOR TREATMENT  
OF HEPATOCELLULAR CARCINOMA AND  
SOLID TUMORS

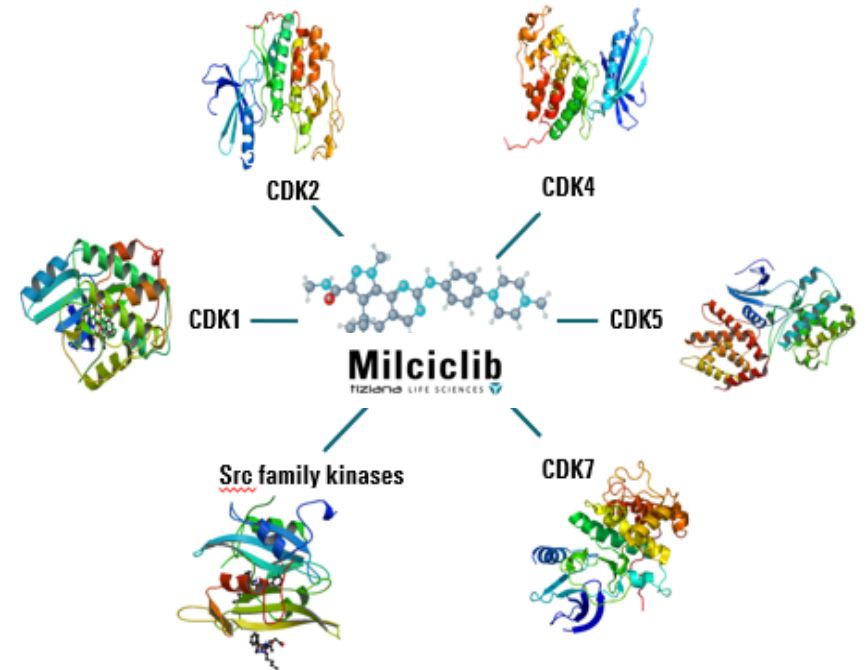
**HCC is a complex and heterogenous  
cancer associated with multiple  
etiological factors**



**Newer treatment approach with broad-spectrum  
action is needed to address heterogeneity of HCC**

# SMALL MOLECULE PAN-CDK INHIBITOR

- Complex heterogeneity in HCC due to multiple etiological agents; Need for broad-spectrum approach
- 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, consecutive 4 days a week in a 4-week cycle). 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. Seven patients completed 9, 9, 10, 11, 13, 13 and 16 months, respectively.
- **No drug related deaths in the trial**
- Treatment was well-tolerated
- Adverse events were manageable
- **Time to progression 5.9 months out of 6 months duration of trial**
- **Stabilized Disease (SD) 61%**
- **Clinical Benefit Response 64%**

Two patients currently continuing compassionate use. Ongoing treatment at 19 months.



Best-in-class genomic signature for prognosis of early and late recurrence of ER+/HER2- breast cancer patients in early stage



- Superior assay based on a stemness signature genes for early prediction of ER+/HER2- recurrence of breast cancer
- Side-by-side comparison study showed StemPrinter assay 40% more accurate than Oncotype DX assay
- This technology will be spin out as a separate NewCo shortly.

# TWO POSTERS PRESENTED AT ASCO

## 1. Comparison of StemPrintER, a Novel Biology-based Genomic Predictor of Distant Recurrence in Breast Cancer, with Oncotype DX in the TransATAC cohort, shows that StemPrintER:

- Significantly ( $p < 0.0001$ ) stratifies high vs. low risk groups when adjusted for clinical parameters as expressed by clinical treatment scores (CTS)
- Outperforms Oncotype DX in 10-year risk prediction in more than 800 ER+/HER2- postmenopausal breast cancer patients, including lymph node-negative (N0) and 1 to 3 lymph node-positive (N1-3) patients
- Adds more prognostic information than Oncotype DX on the top of clinical parameters as expressed by clinical treatment scores (CTS)

## 2. Integration of the stem cell biology-based genomic tool, StemPrintER, with clinicopathological parameters for the prediction of distant recurrence in ER+/HER2- breast cancer patients

- Demonstrates that the next-generation StemPrintER Risk Score (SPARE) model is:
  - approximately 20% superior to the traditional clinicopathological parameters, as expressed by the CTS, in providing prognostic information in more than 1,800 ER+/HER2- patients analyzed;
  - up to 40-50% more accurate in lymph node-negative (N0) and 1 to 3 lymph node-positive (N1-3) patients.

- Investigators found that SPARE added substantial prognostic information to CTS, but the inverse was not proven to be the case.

# INTELLECTUAL PROPERTY PORTFOLIO

FAMILY	SUBJECT	PRIORITY	STATUS	EXPIRES	JURISDICTION
<b>Foralumab</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, Brazil, 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 <u>Pending</u> : 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	Issued/Pending	2037	US <u>Pending</u> : Australia, Canada, China, Europe, Hong Kong, Israel, Japan
	Methods of Use (CNS disorders)	2017	Pending	2038	National
	Methods of Use (gastrointestinal/autoimmune/inflammatory)	2018	Pending	2039	PCT
	Composition and Methods of Use (CAR-T cell therapies)	2020	Pending		US Provisional
<b>Milciclib</b>	Composition of matter, methods of use, process of manufacturing	2003	Issued/ Pending	2024	US, Europe, Eurasia, Africa, Algeria, Argentina, Australia, Barbados, Bosnia & Herzegovina, Canada, Colombia, Costa Rica, Croatia, Cuba, Ecuador, 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, Tunisia, Ukraine, Uzbekistan, Vietnam. <u>Pending</u> : US, Brazil, Egypt, Thailand, Trinidad & Tobago, Venezuela
	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>TZLS-501 (Anti-IL6R)</b>	Composition of Matter and Methods of use	2009	Issued/ Pending	2029	US, Austria, Australia, Belgium, Canada, China, Denmark, France, Germany, India, Ireland, Italy, Japan Luxembourg, Mexico, Netherland, Spain, Sweden, Switzerland and UK. <u>Pending</u> : US (divisional), Japan (divisional)
	Composition of Matter and Methods of use (Inhalation)	2020	Pending		US Provisional

# UPCOMING CATALYSTS

PRODUCT	ACTION/OBJECTIVE	TARGET DATE
<b>Foralumab</b>	Phase 2 trial with orally administered Foralumab in Crohn's Disease patients anticipated completion <ul style="list-style-type: none"> <li>- INITIATION OF THE STUDY (Q3, 2020)</li> <li>- INTERIM ANALYSIS OF CLINICAL DATA (Q1, 2021)</li> </ul>	<b>Q3/Q4, 2021</b>
<b>Foralumab</b>	Phase 2 trial with nasally administered Foralumab in progressive multiple sclerosis (pro-MS) patients anticipated completion <ul style="list-style-type: none"> <li>- INITIATION OF THE STUDY (Q3, 2020)</li> <li>- INTERIM ANALYSIS OF CLINICAL DATA (Q4, 2020)</li> </ul>	<b>Q2, 2021</b>
<b>TZLS-501 (Anti-IL6R)</b>	Development of inhalation technology to deliver stable aerosols directly in lungs (IND SUBMISSION) <ul style="list-style-type: none"> <li>- INHALATION TECHNOLOGY DEVELOPMENT (Q4, 2020)</li> <li>- COMPLETION OF INHALATION TOXICOLOGY IN MONKEYS (Q1, 2021)</li> </ul>	<b>Q2, 2021</b>  <b>Q2, 2021</b>
<b>Milciclib</b>	Initiate Phase 2b in HCC patients with Milciclib in combination with a TKI.	

# CAPITAL STRUCTURE

	ADS EQUIVALENT*
<hr/>	<hr/>
• Ordinary Shares	33,302,303
• Warrants (WAEP: £1.23)	482,654
• Options (WAEP: £0.37)	3,655,881
<hr/>	<hr/>
<b>Fully Diluted Shares</b>	<b>37,440,837</b>

\*Information prepared as of 15 July 2020. 1 ADS represents 5 ordinary shares.

The Company is contemplating/planning to migrate to Bermuda in Q2 2020 to enable delisting from AIM, eliminate its ADR program and have Bermuda common shares on NASDAQ.





**tiziana**  
LIFE SCIENCES

An Innovative Platform in Oral, Nasal and Inhalation for  
Monoclonal Antibody Administration

Differentiated Treatment Approaches for COVID-19,  
Autoimmune Disease and Hepatocellular Carcinoma

**Foralumab**

**TZLS-501**  
(Anti-IL6R)

**Milciclib**

**NASDAQ: TLSA**

**AIM: TILS**

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# CLINICAL DATA SUGGEST MILCICLIB OVERCOMES GEMCITABINE RESISTANCE

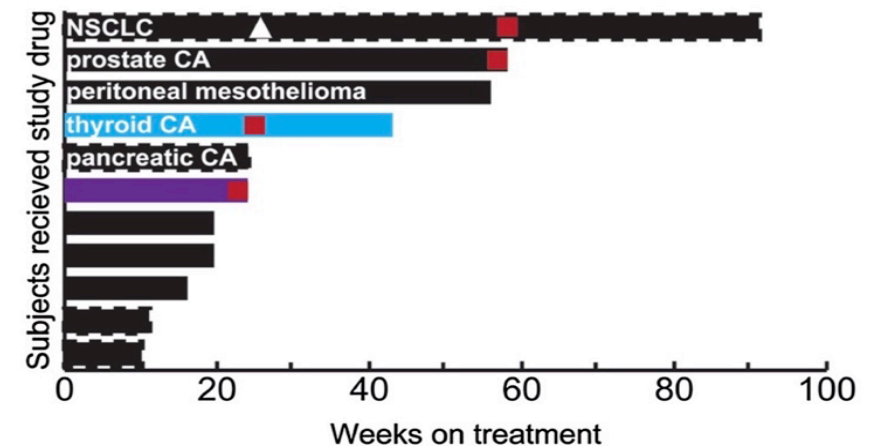
PATIENTS RAPIDLY ACQUIRE RESISTANCE TOWARDS CHEMOTHERAPIES

## KEY FINDINGS FROM PHASE 1 STUDY

1. Milciclib well-tolerated with manageable side effects in patients 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 80mg/m<sup>2</sup>/day for milciclib and 1000mg/m<sup>2</sup>/day for gemcitabine
4. Overall response rate was 36%
5. Results suggest further evaluation in other solid cancers either as monotherapy or combination 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> · Rastilav Bahleda<sup>1</sup> · Anas Gazzah<sup>1</sup> ·  
Andréa Varga<sup>1</sup> · Antoine Hollebecque<sup>1</sup> · Christophe Massard<sup>1</sup> · Anna Spreafico<sup>3</sup> ·  
Michele Reni<sup>3</sup> · Jean-Charles Soria<sup>1</sup>



△ Partial response    ■ End of response  
 — DL1 45 M /1000 G  
 — DL2 60 M /1000 G  
 — DL3 80 M /1000 G  
 - - - - pretreatment with G

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

# HOW DOES OUR PLATFORM TECHNOLOGY WORK?

NOVEL APPROACH FOR SITE-TARGETED IMMUNOMODULATION

