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May 23rd 2017 Presentation

Biotech Agora

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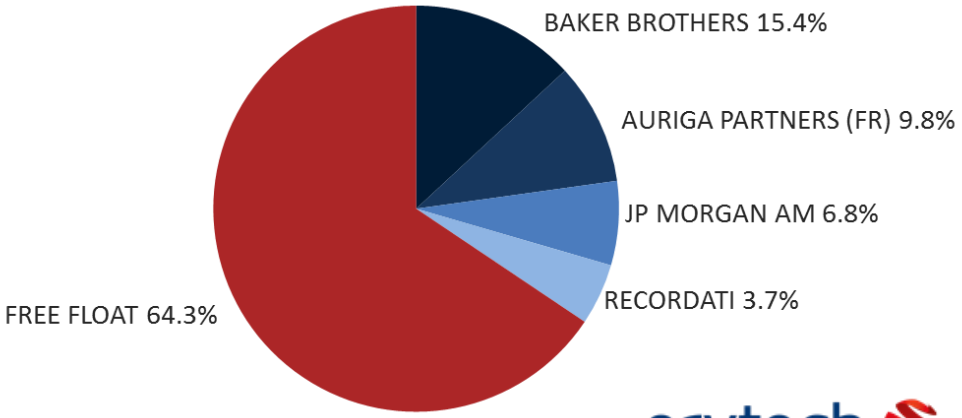
ERYTECH: key corporate facts

Key Corporate Facts

- Founded in 2004; HQ in Lyon
- 92 FTEs, including 30% PhD/MD
- Manufacturing in Lyon and Philadelphia
- Commercialization partnerships with Recordati in EU and TEVA in Israel
- IPO May 2013 on Euronext
  - € 18 million raised
- Secondary offerings in EU and US:
  - € 30 million raised – October 2014
  - € 25.4 million raised – December 2015
  - € 10 million raised – December 2016
  - € 70.5 million raised – April 2017
- ADR 1 listing in US in January 2015
- Market Cap(1): € 312 M
- Cash: € 93.7 million at April 30, 2017

Global Presence

Shareholder Breakdown



(1) As at May 15, 2017

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ERYTECH, a late-stage orphan oncology company

Innovative and versatile ERYCAPS technology platform

- Encapsulation of therapeutic compounds in red blood cells (RBC)
- Strong IP protection
- Broadly applicable

Targeting markets with high unmet medical needs

- Acute leukemia (ALL & AML)
- Select solid tumors
- Other rare cancers, orphan diseases
- 7 Orphan Drug Designations

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Lead product eryaspase (GRASPA®) in late stage clinical development

- Positive Phase 1, 2 and 2/3 in ALL
- Positive Phase 2b in pancreatic cancer
- Phase 2b in AML fully enrolled
- US Phase 1 in ALL ongoing

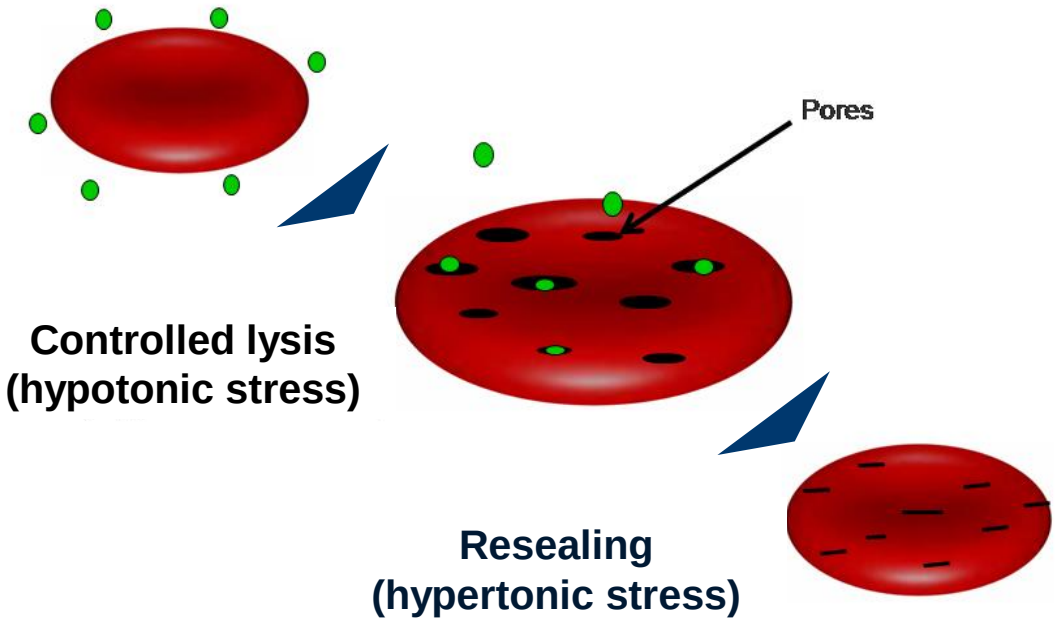
Growth beyond lead programs; leveraging the platform

- Global expansion, focus on US
- Other indications
- Other pipeline products
- Attractive platform opportunities

ALL: Acute Lymphoblastic Leukemia; AML: Acute Myeloid Leukemia

ERYCAPS, an innovative and versatile technology platform

Entrapment of drug substance inside donor-derived red blood cells using hypotonic/hypertonic stress



Proprietary 'osmotic fragility' process ensures required amount of drug in each RBC batch

Molecules from 1 to 500 kDalton (peptides, enzymes, antigens, ...)

Protected by 13 patent families

Industrialized in commercial scale GMP manufacturing facility

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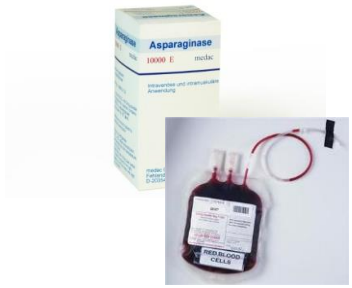
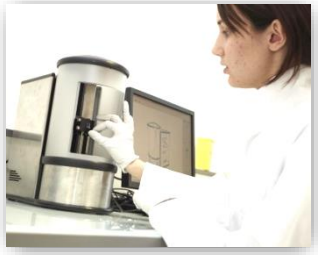
ERYCAPS, an industrialized process ready for commercialization





1 Sourcing | 2 Preparation | 3 Encapsulation | 4 Batch release | 5 Shipping

Prescription → Purchase of pack of compatible RBC → Identification of the key parameters(1) → Automated process (3 - 8 hours) → Quality control → Release by QP → Patient

Est. 24 hours

- Centralized EU GMP production facility in Lyon, France. Sized for the first two years of marketing of eryaspase in ALL
- US production facility in Philadelphia, at the premises of the American Red Cross, for clinical trial production

(1) Measurement of osmotic fragility, verification of blood typing group documents, expiry date, volume, hematological parameters.

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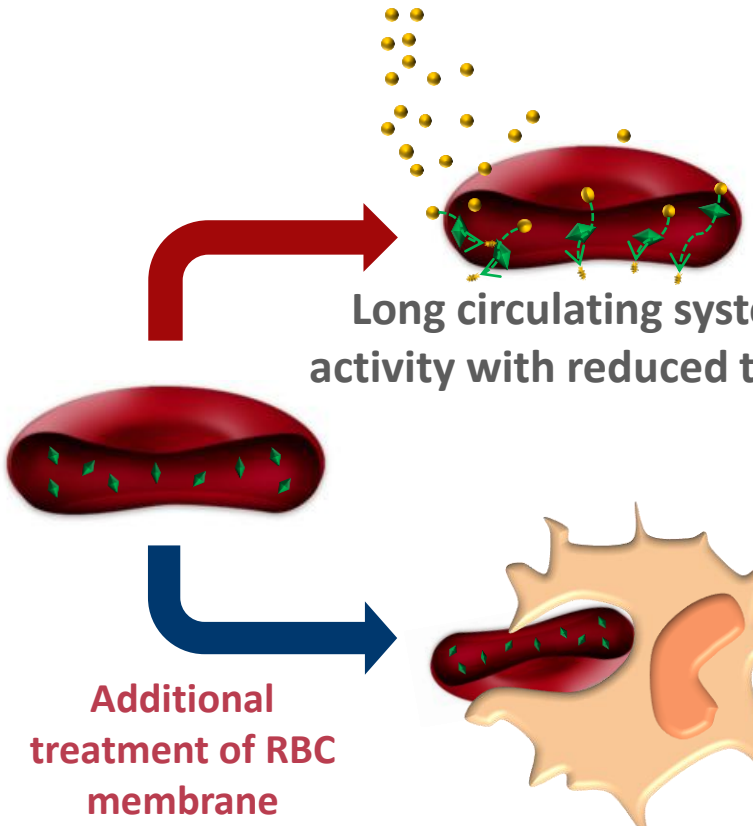
ERYCAPS, two main modes of action, broad application potential



Long circulating systemic activity with reduced toxicity

Additional treatment of RBC membrane

Rapid & specific targeting of immune cells in spleen, liver or bone marrow

Examples of applications
Enzymes targeting cancer metabolism (E.g., asparaginase in ALL, AML, PC)
Enzymes for enzyme therapies (E.g., methioninase in homocystinuria)
Antigens for cancer immunotherapies (E.g., TRP2 in melanoma)
Antigens for tolerance induction (E.g., tolerance induction to alglucosidase-a)

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Broad clinical pipeline building on ERYCAPS platform

Mode of action	Product Candidate/ PROGRAM	Drug substance	Indication	Discovery	Pre-clinical	Phase 1	Phase 2	Phase 3/ Pivotal	EMA/FDA review	Commercial Rights
Cancer metabolism **Tumor starvation**	eryaspase (GRASPA®(1))	Asparaginase	ALL	EU						RECORDATI Europe
				US						TEVA Israel
			AML	EU then EU/US						erytech US and RoW
			Pancreatic cancer	EU then EU/US						
			NH-lymphoma							
	ery-methionase	Methionine-γ-lyase	Solid tumors							erytech
	eryminase	Arginine deiminase	Solid tumors							
Enzyme therapies	ERYZYME	Therapeutic enzymes	Metabolic diseases							
Immuno-therapy	ERYMMUNE	Tumor antigens	TBD							

(1) Brand name for eryaspase in Europe and Israel

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Q1 2017, a transformational quarter for ERYTECH

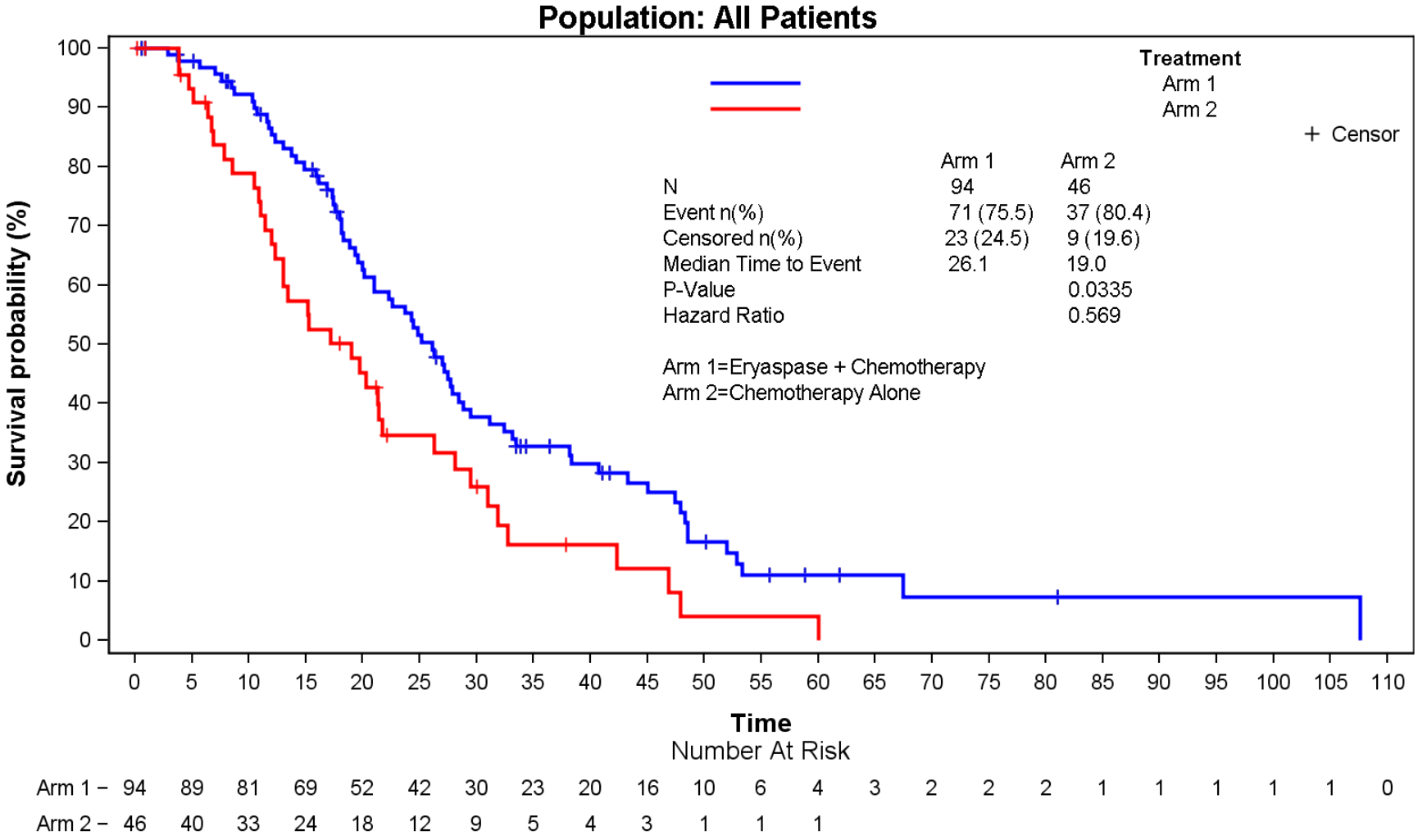
Q1 2017 and recent business highlights

- Positive Phase 2b data in pancreatic cancer for eryaspase (Graspa®) , showing significant improvement in both progression-free survival (PFS) and overall survival (OS)
- Launched investigator-initiated Phase 2 study of eryaspase in acute lymphoblastic leukemia (ALL)
- Presented promising preclinical data on erymethionase and ERYMMUNE at international conferences
- Cash position of €30.5 million as of March 31, 2017
- €70.5 million raised through a private placement in April 2017

Positive Phase 2b data in pancreatic cancer for eryaspase

- Randomized, multicenter, controlled Phase 2b study in 2nd line metastatic pancreatic cancer patients, comparing standard of care (gemcitabine or FOLFOX) plus eryaspase versus standard of care alone in a 2-to-1 randomization
- 140 patients treated in 16 sites in France; well balanced baseline characteristics and demographics
- Primary objective: evaluate effect of eryaspase on PFS and OS in patients with low asparagine synthetase (ASNS) expression, about 70% of the study population, with a pre-specified Hazard Ratio (HR) below 0.85 for either PFS or OS.
- Primary endpoint met: HR of 0.73 for PFS and 0.62 for OS
- The study also showed PFS and OS benefit in the entire patient population (see next slide) and a favorable safety profile
- Complete data will be presented at an upcoming medical conference, and will be submitted for publication
- Planning to discuss further development plans in the with the FDA and CHMP

Survival benefit in entire population



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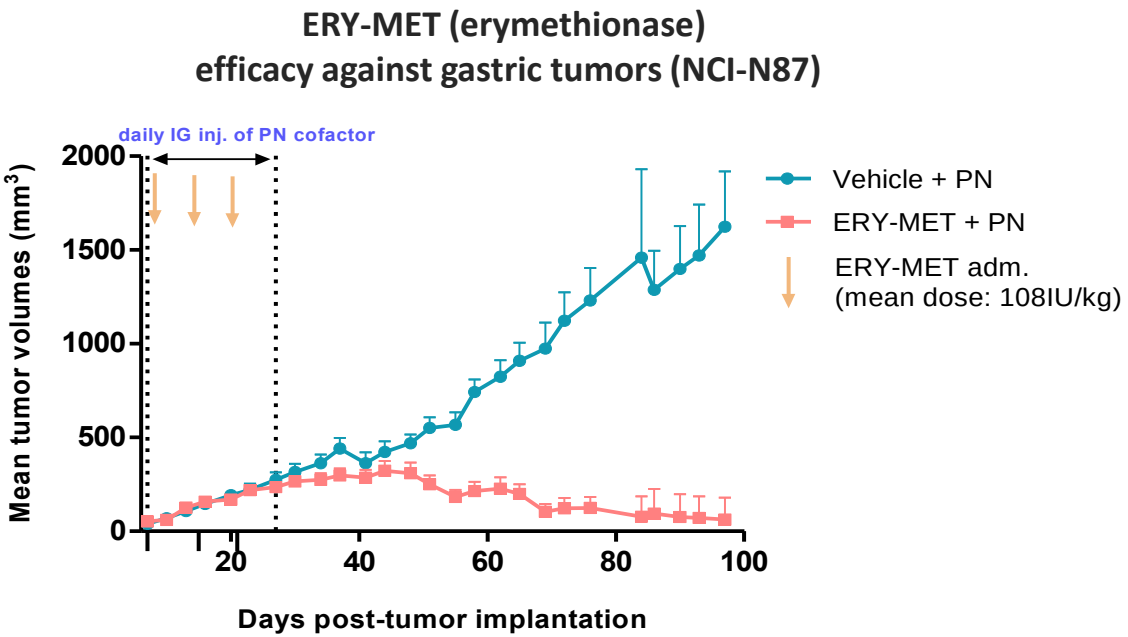
Launch of investigator-initiated Phase 2 study of eryaspase in ALL

- Single arm, multi-center, multi-national Phase 2 study is expected to enroll approximately 30 ALL patients at 23 sites across seven Nordic and Baltic countries
- The main objectives of the study are to evaluate the biological (pharmacokinetic and pharmacodynamic) activity, safety, and immunogenicity profile of eryaspase in combination with the NOPHO ALL 2008 multi-agent chemotherapy protocol administered as second-intention treatment for children or adult ALL patients (1 to 45 years old) who experience hypersensitivity reactions to or silent inactivation of PEG-asparaginase
- Study commenced in April 2017 and will continue for approximately 2 years
- Principal investigator: Dr. Birgitte Klug Albertsen, Aarhus University, Denmark

Promising preclinical data on erymethionase's anti-tumor activity

- ERYTECH presented new anti-tumor data from its preclinical product candidate erymethionase at the ASCO GI and the AACR meeting in January and April

- Repeated injections of erymethionase in combination with daily administration of vitamin B6 exhibited anti-tumor activity in 100% of treated mice, with nearly complete response



- Findings from the preclinical study in gastric cancer confirmed earlier study in glioblastoma and demonstrated erymethionase's potential as a new treatment approach against a broad range of cancers that rely on methionine metabolism

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Collaboration with FCCC on rare disease homocystinuria

- The company signed a research collaboration with Fox Chase Cancer Center (FCCC) in Philadelphia (United States) to advance the pre-clinical development of the company's erymethionase program for homocystinuria, a rare and severe metabolic disorder of methionine metabolism
- The collaboration aims to leverage FCCC's world-class expertise to generate *in vivo* proof-of-concept data with erymethionase in a homocystinuria animal model

Other key programs progressing

- Resubmission of EU MAA for GRASPA in ALL targeted in Q3
- US Phase 1 in newly diagnosed adult ALL ongoing
  - Definition of recommended Phase 2 dosing expected mid 2017
  - Planning to discuss further development plans with the FDA in H2 2017
- Top-line results of EU Phase 2b AML study expected end Q4 2017
- Further incubating our ERYMMUNE immuno-oncology platform; further proof of concept data expected H2 2017

Resubmission of EU MAA for GRASPA in ALL targeted in Q3

- EU MAA submitted to EMA in September 2015, based on positive safety and efficacy results from pivotal Phase 2/3 study comparing GRASPA vs native L-asparaginase in relapsed & refractory ALL patients (1 to 55 years of age; N=80)
- CHMP's D180 List of Outstanding Issues received in September 2016 highlighting need for additional data on:
  - Comparability(1)
  - Immunogenicity
  - Pharmacodynamic effects
- Decided to withdraw current application in November 2016 because additional data requested will take more time to provide than allowed in procedure
- Planning to resubmit an MAA with the additional data end Q3 2017

(1) Comparability between eryaspase with native L-asparaginase encapsulated in the RBCs, as used in the ALL studies to date, and eryaspase produces with the newly approved recombinant L-asparaginase

US Phase 1 study in 1st line adult ALL ongoing

- Open label dose escalation study with eryaspase in combination with CALGB 8811 protocol for 1st line treatment of adult ALL patients
- Principal investigator: Prof. Dr. Richard Larson, University of Chicago
- Five active sites across the US
- Treating patients in second treatment cohort; definition of recommended Phase 2 dosing expected mid 2017
- Planning to discuss further development plans with the FDA in H2 2017

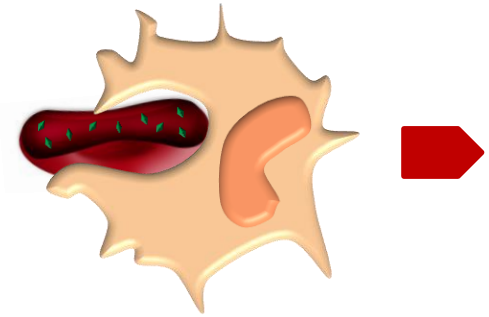
Top-line results of EU Phase 2b AML study expected end Q4 2017

- Est. 40,000+ new patients per year (US & EU); poor prognosis and low survival
- Clinical evidence of benefit of asparaginase in AML and ad hoc clinical use
- A disease primarily in elderly patients; the use of asparaginases is prohibitive due to toxicity
- Randomized Phase 2b European study ongoing in AML patients over 65 years of age and unfit for intensive chemotherapy, comparing eryaspase (GRASPA®) plus low dose Ara-C (LDAC) versus LDAC alone
  - N = 123; randomized 2-to-1
  - Primary endpoint: Overall Survival (OS)
  - Three IDMC safety reviews passed
  - Patient enrollment completed in August 2016
  - Reporting of top-line results expected end Q4 2017
  - Study financed by Orphan Europe (Recordati)
- Next steps contingent on outcome of ongoing Phase 2b study

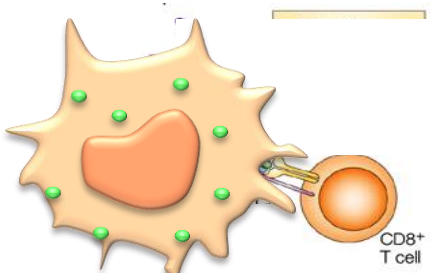
Beyond tumor starvation: immunotherapy with antigen-loaded RBCs

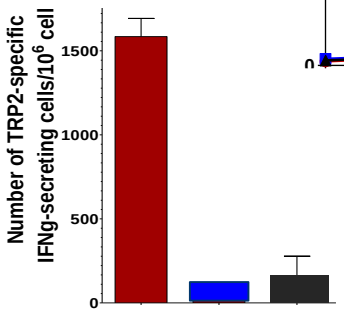
- Promising proof of concept obtained with RBC-based immunotherapy approach
  - Generation of antigen-specific cytotoxic CD4+ and CD8+ T-cells by antigen-loaded RBCs, modified for rapid targeting of antigen-presenting cells (APC) in the spleen
  - Preclinical proof of concept with TRP2(1) and PSA(2) loaded RBCs
- Further incubating this technology; new proof of concept data expected Q3 2017

ERYTHROPHAGOCYTOSIS OF 'SENESCENT' ANTIGEN-CONTAINING RBCs BY APC

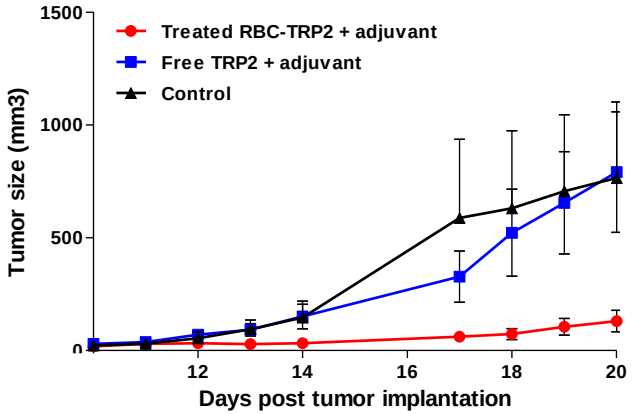


GENERATION OF ANTIGEN SPECIFIC CYTOTOXIC CD4+ & CD8+ T-CELLS





DELAY OF TUMOR GROWTH



(1) Banz et al, J Immunother, 2012.

(2) Cremel, presentation at CITIM 2015

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Q1 2017 financial results

- Key financial figures for Q1 2017 compared to Q1 2016 (in 000 €)

	Q1 2017	Q1 2016	Variation
Revenues	0	0	0
Other income	1,222	684	538
Total operating income	**1,222**	**684**	**538**
Research & development	(5,847)	(3,638)	(2,209)
General & administrative	(1,906)	(1,473)	(433)
Total operating expenses	**(7,753)**	**(5,111)**	**(2,642)**
Operating loss	**(6,531)**	**(4,427)**	**(2,104)**
Financial income	21	97	(77)
Income tax	(13)	4	(17)
Net Loss	**(6,523)**	**(4,325)**	**(2,198)**

- Net loss for Q1 2017 was €6.5 million, compared to €4.3 million in Q1 2016.
- The €2.2 million increase was primarily due to the activities to advance the company's preclinical and clinical development programs

Cash position of €30.5 million as of March 31, 2017

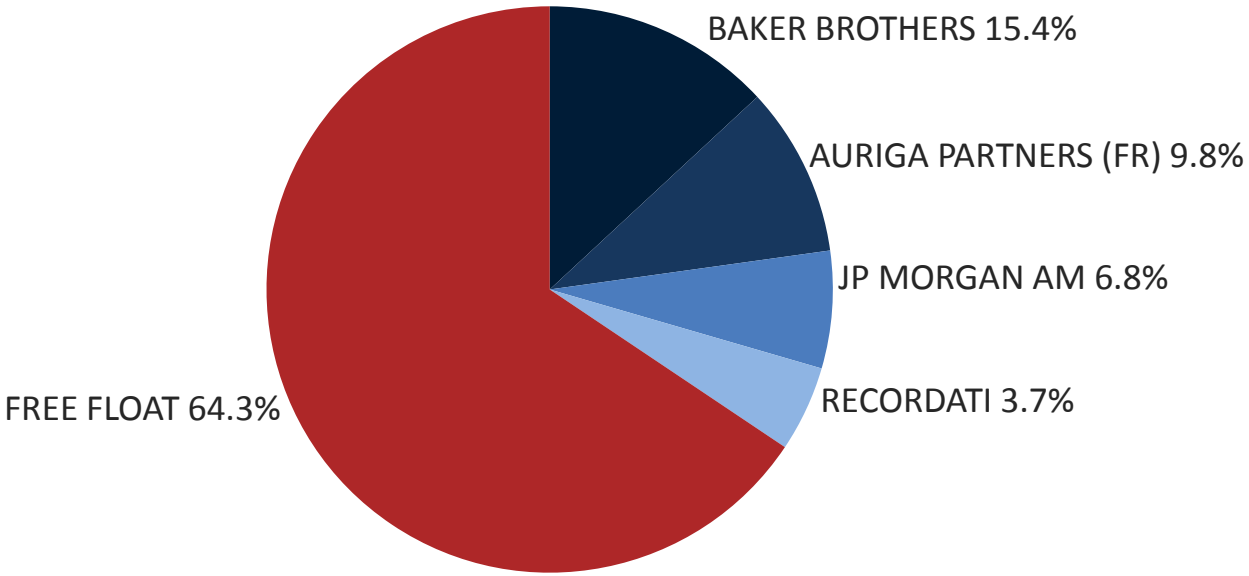
- Cash position of €37.7 million at start of 2017
- €7.1 million total net cash utilization in Q1 2017
  - €6.9 million used in operating activities
  - €0.6 million used in investing activities
  - €0.4 million received from financing activities
- Cash balance of €30.5 million as of March 31, 2017

€70.5 million raised through a private placement in April 2017

- In April 2017, the company completed successfully a private placement to U.S. and European investors
- 3,000,000 new shares were issued
- The net proceeds of approximately €64.5 million will be utilized to:
  - Finance the preparatory steps for the launch of potential Phase 3 studies, notably for the pancreatic cancer indication
  - Assess the clinical development opportunities for eryaspase for the treatment of other solid tumor indications, in addition to its ongoing preclinical and clinical programs
  - Further strengthen the company's financial position for its continued development

Shareholder base

- Shareholder structure after the April 2017 private placement [1]:



1) Based on available information as of April 20, 2017

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Key upcoming milestones

- ☑ Results from Phase 2b pancreatic cancer study
- ❑ MTD defined in US Phase 1 adult ALL study
- ❑ Meeting with agencies on pancreatic cancer development plan
- ❑ Resubmission of EU marketing authorization application for GRASPA in R/R ALL
- ❑ Meeting with FDA on ALL further development plan
- ❑ Preclinical proof of concept data with ERYMMUNE and ERYZYME programs
- ❑ Launch of Phase 3 study in pancreatic cancer
- ❑ Results from EU Phase 2b AML study
- ❑ Launch of erymethionase (ERY-MET) Phase 1 study

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