iQur Limited

Corporate Overview

Bringing knowledge to life

iQur

A VACCINE COMPANY

- *USING A PROPRIETARY PLATFORM TECHNOLOGY*
- *WHOSE LEAD VACCINE CANDIDATE IS*
- *A UNIVERSAL FLU VACCINE*
- *SHOWN TO BE 100% EFFECTIVE IN MICE*

Influenza – still a major health problem

- Flu is a major killer, even in the 21st century
  - An **infectious** disease which circulates widely
  - A **severe** illness: 3-5 million cases per year worldwide
  - Potentially **fatal**, causing 300,000-500,000 deaths per year
- A master of disguise
  a shifting target for immune defence
  - Many different strains
  - Changes each year within individual strains
  - Often the prevalent strain has not been predicted

Flu treatments

- Drugs will shorten the illness & alleviate symptoms
- Seasonal vaccines
  - Are the “best guess” of the annual flu strains
  - Provide variable protection
  - Must be repeated each year
  - Often fail as cover 1-2 strains only
  - Target the highly variable globular domains of HA and NA
  - Difficult to design & manufacture vast quantities at short notice
  - No coverage for Pandemic Flu

Vaccines

- No infectious disease has ever been eliminated without a vaccine
- Vaccines are not reliant on drugs which can lead to resistance
- Flu vaccine market was valued at $4bn in 2014 and is expected to reach $6.87bn by 2020 (*Zion Research March 2016*)

iQur is working towards the creation of a universal flu vaccine which would eliminate the need for seasonal vaccines / redesigns and provide protection against pandemic flu

iQur's technology

- iQur has developed a proprietary "plug and play" system for making vaccines against any infectious agent
- It uses a protein scaffold to make virus-like-particles
- These virus-like-particles stimulate immune responses to proteins that are otherwise inert
- iQur's protein scaffold – Tandem Core – is unique and enables FLUTCORE to present invariant parts of the flu virus which would not normally stimulate a protective immune response
- This vaccine will avoid the need to redesign the vaccines each year and will provide protection against emergent strains of *pandemic flu*
- iQur is using this technology to develop a portfolio of vaccines in addition to FLUTCORE including malaria, dengue, hepatitis C and other New and Emerging Infections.

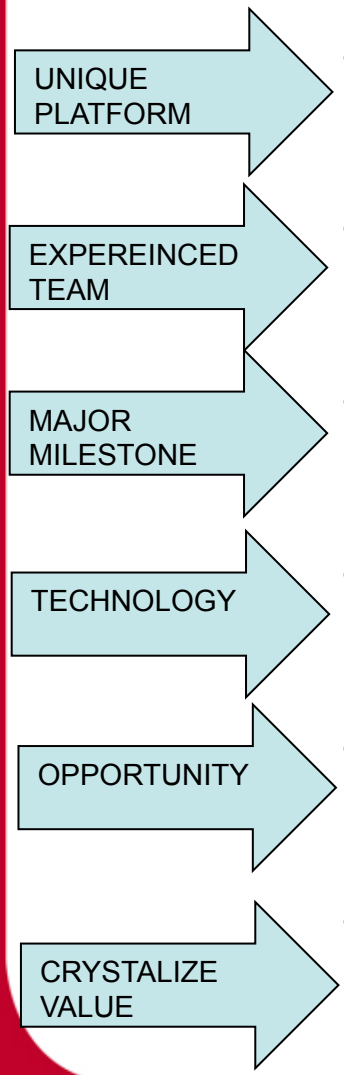
Current development stage

- A major inflexion point has been reached
  - *technology is ready to transfer to large scale manufacture*
- Proof of Concept vaccination in mice
  - *100% effective in mice*
- Manufacturing method developed and scalable
- Regulatory advice from MHRA
- Moving to GMP manufacture and preclinical testing
- First in man clinical trial to start 2018

Strategy:

- **Complete phase 1 clinical trials for Flutcore**
- **Maximise commercial & clinical success via out-licensing to a larger partner**

Investment highlights



- Exclusive commercial rights to work with **Tandem Core** platform for development of vaccines
- Strong Board, advisors & vaccinologists with **track record** of bringing drugs & vaccines to the market
- Data transferred to partner ready to commence large scale manufacture for phase 1 clinical trial in Q4 2017
- Innovative, proprietary approach using **two virus-like-particles** to provide protection against different strains of flu
- Further funding of £3m required to take **Flutcore** through phase 1 clinical trial
- Phase 1 trial will provide **both** safety data **and** proof of concept. Successful results will enable iQur to out license and secure a commercial partner

Project Plan & Key Milestones

	Milestone	Responsibility	T	T+Q1	T+Q2	T+Q3	T+Q4	T+Q5	T+Q6	T+Q7	T+Q8
in progress	*Final candidate selection*	*iQur*									
	Manufacture of 10L laboratory batch	*UCL*									
	Transfer of technology to 3P										
1	**R&D batch manufacture**										
	Manufacture & analysis of 10L tech / R&D batch	**3P**									
2	**Manufacture according to GMP guidelines**										
	Production of 100L Engineering batches	**3P**									
	Production of 100L GMP batches	3P									
	Manufacture of drug product	**3P**									
3	**Pre-clinical tests**										
	Pre clinical efficacy testing on ferrets	**ELC Group**									
	Pre-clinical safety testing on rats	**ELC Group**									
4	**Stability studies**										
	To ensure product quality, safety & efficacy throughout shelf life	**3P**									
5	**Registration for Clinical Trial**	**ELC Group**									
6	**Clinical Trial**										
	Clinical trial	**Val d'Hebron**									
	Monitoring of clinical trial	**iQur**									
	outsourcing partners to commence	**iQur**									

Use of funds

	FLUTCORE Milestones & associated costs (Euros)	Responsibility		Cost	
	Transfer of technology to 3P following final candidate selection & manufacture of lab	*iQur*			
1	**Manufacture & analysis of 10L tech / R&D**	**3P**	€	260,000	
2	**Manufacture according to GMP guidelines**	**3P**	€	690,000	
3	**Pre-clinical safety & efficacy tests on rats & ferrets**	**ELC Group**	€	450,000	
4	**Stability studies to ensure product quality, safety & efficacy throughout shelf life**	**3P**	€	400,000	
5	**Registration for Clinical Trial Application**	**ELC Group**	€	150,000	
6	**Clinical Trial**				
	Clinical trial	Val d'Hebron	€	200,000	
	Monitoring of clinical trial	iQur	€	100,000	
	Total FLUTCORE development costs		**€**	**2,250,000**	
	iQur corporate costs & overheads over 24 months (GBP)				**£ 711,900**
	GBP equivalent of Euro manufacturing costs of €2,250,000				
	FX rate £1= 1.10				**£ 2,045,455**
	Contigency - 10% of total costs				£ 275,735
	TOTAL FLUTCORE GBP COSTS				**£ 3,033,090**

Thank You

william.rosenberg@iqur.com