

# CHI: Program Updates 7-Sep 2019





# Background





#### Rezolute: A Metabolic and Orphan Disease Company With a Diversified Pipeline

Program	Description	Preclinical	Phase 1	Phase 2
RZ358	Antibody for CHI	Phase 2b dosing anticipate	d 2H'19	
RZ402	Oral PKI for DME	IND anticipated mid- year '20		
AB101	Weekly insulin	Top-line results anticipated	2H'19	



#### **Observational Study Demonstrates Unmet Need**



#### Continuous Glucose Monitoring (CGM) for Two Weeks: Summary of Results

- Blood glucose <70 mg/dL is hypoglycemia</li>
- On average, patients had ~3 hours / day (~180 min) of hypoglycemia, even on standard of care (SOC) medications
- Younger ages are particularly vulnerable

Glucose Threshold (mg/dL)	All Patients		Patients on SOC Medication		
	All Ages (N = 22)	2-6 Year Olds (N = 12)	All Ages (N = 15)	2-6 Year Olds (N = 9)	
<70	174	207	174	223	
<60	56	74	54	81	
<50	15	22	14	24	
CGM reveals current therapies are ineffective at controlling hypoglycemia					



## Unique Mechanism Attenuates Insulin Effects



- · High affinity binding to the insulin receptor at the allosteric site
- High selectivity to the insulin receptor (no IGF-1 interaction)
- Insulin still binds and signals
- Dims the insulin signal when insulin is elevated





## Potential to Address Limitations of Standard of Care



	RZ358 (Broad Focus)	Standard of Care (Narrow Focus)		
Detelopment	Tailored for CHI	Not developed for CHI		
Tegeting	Insulin receptor/signal on insulin-dependent target tissues	Beta cell only		
Rovancy	Potentially universal treatment	Genetics-dependent narrow targeting		
Impact	Reversibly counteracts insulin only when insulin is elevated	Marginally effective, invasive, and/or significant side effects		



## Phase 2a – Completed Proof of Concept

#### Design

- · Single IV doses of 1 to 9 mg/kg in patients with CHI
- Ages  $\geq$  12 in Europe and  $\geq$  18 in the US

#### Results

- · PK comparable with healthy volunteers
- · Baseline and post-treatment CGM
  - Near universal normalization of glucose across a variable group of patients
  - Approximately 50% improvement in patients with baseline hypoglycemia
  - · No hyperglycemia in patients without a present need
  - Effect persisted for several weeks, consistent with Ph1 PK/PD
  - · Established proof-of-mechanism and efficacy in CHI patients
- · Safe and well-tolerated





# RZ358-606: Phase 2b Study Protocol



## RZ358-606: Phase 2b Study Overview

- **Design**: Open-label, repeat-dose study in 4 sequential ascending dosing cohorts (6-8 patients per cohort)
- **Population**: CHI ≥ 2 years old with baseline hypoglycemia by specified CGM thresholds
- Duration of individual participation: ~27 weeks
- Principal assessments / endpoints: CGM Glycemic Endpoints and Modified Overnight Fast
- Interim Analysis: Open label design provides opportunity for interim discussions with health authorities

Dosing Cohort	Induction Dosing				Maintenance Dosing	
	Weekly RZ358 for 4 weeks (mg/kg)				RZ358 for 4 weeks	
	Week 1	Week 2	Week 3	Week 4	mg/kg	Interval
1	3	3	3	3	3	14 Days
2	6	6	6	6	6	14 Days
3	9	9	9	9	9	14 Days
4	3	6	9	12	9	14 Days







# Questions?

