



Anders Kronström, Chief Operating Officer  
Infants Bacterial Therapeutics, Stockholm, Sweden



2nd Global Summit on  
**Pediatrics & Neonatology**

November 15, 2022

# Disclaimer

---

You must read the following before continuing. The following applies to this document and the information provided in this presentation by Infant Bacterial Therapeutics AB (publ) (the “Company”) or any person on behalf of the Company and any other material distributed or statements made in connection with such presentation (the “Information”), and you are therefore advised to carefully read the statements below before reading, accessing or making any other use of the Information. In accessing the Information, you agree to be bound by the following terms and conditions.

The Information does not constitute or form part of, and should not be construed as, an offer of invitation to subscribe for, underwrite or otherwise acquire, any securities of the Company or a successor entity or any existing or future subsidiary or affiliate of the Company, nor should it or any part of it form the basis of, or be relied on in connection with, any contract to purchase or subscribe for any securities of the Company or any of such subsidiaries or affiliates nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. Specifically, this presentation does not constitute a “prospectus” within the meaning of the U.S. Securities Act of 1933, as amended.

The Information may not be reproduced, redistributed, published or passed on to any other person, directly or indirectly, in whole or in part, for any purpose. The Information is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident of, or located in, any locality, state, country or other jurisdiction where such distribution or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction. The Information is not for publication, release or distribution in the United States, the United Kingdom, Australia, Canada or Japan, or any other jurisdiction in which the distribution or release would be unlawful.

All of the Information herein has been prepared by the Company solely for use in this presentation. The Information contained in this presentation has not been independently verified. No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the Information or the opinions contained herein. The Information contained in this presentation should be considered in the context of the circumstances prevailing at that time and has not been, and will not be, updated to reflect material developments which may occur after the date of the presentation. The Company may alter, modify or otherwise change in any manner the content of this presentation, without obligation to notify any person of such revision or changes.

This presentation may contain certain forward-looking statements and forecasts which relate to events and depend on circumstances that will occur in the future and which, by their nature, will have an impact on the Company’s operations, financial position and earnings. The terms “anticipates”, “assumes”, “believes”, “can”, “could”, “estimates”, “expects”, “forecasts”, “intends”, “may”, “might”, “plans”, “should”, “projects”, “will”, “would” or, in each case, their negative, or other variations or comparable terminology are used to identify forward-looking statements. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in a forward-looking statement or affect the extent to which a particular projection is realised. Factors that could cause these differences include, but are not limited to, implementation of the Company’s strategy and its ability to further grow, risks associated with the development and/or approval of the Company’s products candidates, ongoing clinical trials and expected trial results, the ability to commercialise IBP-9414 or IBP-1016, technology changes and new products in the Company’s potential market and industry, the ability to develop new products, the impact of competition, changes in general economy and industry conditions and legislative, regulatory and political factors. While the Company always intends to express its best judgment when making statements about what it believes will occur in the future, and although the Company bases these statements on assumptions that it believe to be reasonable when made, these forward-looking statements are not a guarantee of its performance, and you should not place undue reliance on such statements. Forward-looking statements are subject to many risks, uncertainties and other variable circumstances. Such risks and uncertainties may cause the statements to be inaccurate and readers are cautioned not to place undue reliance on such statements. Many of these risks are outside of the Company’s control and could cause its actual results to differ materially from those it thought would occur. The forward-looking statements included in this presentation are made only as of the date hereof. The Company does not undertake, and specifically decline, any obligation to update any such statements or to publicly announce the results of any revisions to any of such statements to reflect future events or developments.

# IBT in Short

- **Founded in Sweden in 2013. IPO in 2016 at NASDAQ main market in Stockholm.**
- **IBT is currently developing the drug candidate IBP-9414, in clinical Phase III**
- **We are today the only company dosing bacteria to preterm infants under US IND**
- **The vision for IBP-9414 is to become the world's first approved pharmaceutical grade probiotic with the goal to prevent life threatening diseases in premature infants**

# Major Unresolved Medical Needs in Preterm Babies



**Preventive treatments are needed**

**There are no more vulnerable patients**



# The Connection Trial - first ever probiotic phase 3 study under US IND.

## The Connection Trial

- Double blind, placebo-controlled, parallel group, multicenter phase 3 study.
- Preterm infants of BW 500-1500g and cGA 23-32w.
- Endpoints: Primary- Incidence of NEC and time to Sustained Feeding Tolerance (SFT).
- Secondary- Medical NEC, Surgical/autopsy NEC, mortality, weight gain, duration of hospitalization, feeding intolerance.
- IBP-9414 containing pharmaceutical grade *L. Reuteri* given enterally at a single daily dose of  $10^9$  CFU or sterile water placebo.
- Contributing centers in Bulgaria, France, Hungary, Israel, Poland, Romania, Serbia, Spain, UK, and US.

## Pharmaceutical grade requires rigorous control

- Full pharmaceutical GMP (21 CFR Part 210/211) from cell banking to final product including raw materials, ingredients and excipients
- ICH stability and shelf-life determination
- Validated procedures for correct dosing

# ‘Connection Trial’- interim data on 708 ELBW infants

## **The present infant material**

1. 708 infants included in a per-protocol defined safety analysis.
  - a. 116 infants in 500-749g (mean 648g).
  - b. 592 infants in the 750-1000g (mean 884g).
2. All data blinded to treatment- group allocation.
3. Clinical events collected from Investigator reports on adverse events.
4. Treatment period mean 52 days.

## **Dual analyses**

1. Profile and frequency of serious adverse events (SAEs)
2. Event correlations to the time to SFT.

# Profile and frequency of SAE\* in infants of 500-749g and 750-1,000g

## Outcomes

- **Infant mortality: 14 (12%) and 32 (5.4%)**
  - CoD dominated by cardiopulmonary SAEs (31%), sepsis (24%), NEC and IVH.
- **At least one SAE: 44 (38%) and 142 (24%)**
  - mean 0.57 SAEs per infant.
  - 50% SAEs occurred during first 2 weeks of life.
  - frequency inverse to BW and 3 times more common in the lower BW interval.
- **Infectious disorders (71 infants) most common SAE**
  - dominated by sepsis- septic shock (54 infants)
  - reported in 18.1% and 8.4%
- **Respiratory SAEs in 61 infants**
  - reported in 12.1 % and 7.9% and
  - included BPD in 5.2% vs 2.8%
- **Serious GI in 61 infants**
  - NEC in 7.8% and 3.7%
  - GI perforation in 4.3 and 2.4%
- **Serious IVH- intracranial hemorrhage in 6.9% and 3.6%**
- **PDA in 4.3% and 2.2%**
- **ROP in 3.4% vs 0.5%**

\*deemed life-threatening or e.g., to prolong hospitalization by responsible Investigator

## Conclusion

- **Mortality lower than expected (cf. e.g., VON\*, QMH\*\*)**
- **SAE type and incidence consistent with expectation (cf. e.g., VON\*, QMH\*\*)**
- **Most serious events during the first weeks of the study and in smallest babies**

\*Rysavy MA et al. JAMA Pediatr. 2020;174: e196294. doi: 10.1001.

\*\*Chee YY et al. Hong Kong Med J. 2017;23: 381-6.

### **Sustained Feeding Tolerance (SFT) Definition**

SFT defined strictly as 10 consecutive days with

1. daily enteral feeding  $\geq 120$  ml/kg,
2. no parenteral nutrients and
3. average body weight increase of at least 10g/kg/day

Time to SFT is measured from first dose of IP to first day of the first 10-day period and a primary endpoint of the Connection Trial.

### Event correlations to the time to SFT

#### Infant material

- 519 infants reaching SFT
- 122 infants not reaching SFT during treatment up to cGA 34w+6 days
- 90 infants were excluded due to early study withdrawal for reasons of death, transfer, withdrawn consent etc

#### Methods

- Univariable correlation of events to the time to SFT
- Multivariable correlation with use of the Akaike information criterion for events of statistical significance ( $p < 0.05$ ) at univariable analysis

# Univariable regressions analysis

## Events with association of statistical significance (<0.001-0.02) to the time to SFT

Event	Coefficient**	R <sup>2</sup>	Event	Coefficient**	R <sup>2</sup>
Birth weight (100 g)	-3.0	8.7	Respiratory SAE*	8.0	3.3
cGA (week)	-2.7	19.4	Pneumonia	10.1	6.4
Apgar score 5 min	-1.0	2.3	BPD	2.4	1.0
Any SAE*	6.8	5.3	Intracranial bleeding	3.8	2.0
GI SAE*	8.5	2.0	PDA	6.2	6.9
Abdominal symptom	3.4	1.6	Cardiac SAE*	13.6	1.4
GI perforation	21	6.4	Hypotension	14.4	6.5
NEC	6.8	2.6	Renal event	5.9	1.4
Clinical sepsis	5.6	3.4	ROP	4.9	4.0
Culture positive sepsis	5.2	2	Days in hospital	0.25	20.4
Days with antibiotics	0.11	4.9			

\*Considered by investigator as e.g. life-threatening

\*\*Coefficients are the number of days difference in time to SFT related to a 1-unit change in the event

\*\*\*R<sup>2</sup> is the coefficient of determination of the event for the time to SFT

# Multivariable regression analysis

## Multivariable regression after the stepwise procedure

Event	Coefficient*	P	Event	Coefficient*	P
cGA week	-0.74	0.04	Respiratory SAE	4.5	0.01
Abdominal symptom	2.5	0.02	Pneumonia	4.2	0.009
GI perforation	15.4	<0.001	Cardiac SAE	9.0	0.04
Clinical sepsis	3.5	0.003	Hypotension	5.7	0.009
Days on antibiotics	0.04	0.03	Days in hospital	0.1	0.001

Model overall R<sup>2</sup>, 35%

\*Coefficients refers to the number of days difference in the time to SFT for a 1-unit change in the event

## Event correlations to the time to SFT

- Several GI complications associate to a delay in the time to SFT.
  - stronger for perforation and obstruction than NEC.
- The time to SFT is extended in infants with extra-GI complications like pneumonia, cardiac events and hypotension .
- Co-occurrence of events (as measured with univariable analyses) prolong the time to SFT even further.
- Reasons for withholding enteral feedings in ELBW infants may benefit from re-evaluation.



# Thank you & Arrivederci

**Infant Bacterial Therapeutics AB**

[www.ibtherapeutics.com](http://www.ibtherapeutics.com)