Company Overview

**Industry Sector:** Medical Innovations

**Company Overview:** In 1994, Metabolic Nutritional was started by Dr Neil Buist to be a conduit for the development of special Medical Foods for the treatment of Inborn Errors of Metabolism at a time when such products were extremely basic and very unappealing. This work resulted in a patent that has provided a small income stream that permitted the early development of the device that has occupied us over the past ten years - the Orometer.

Buist's work as a professor at OHSU in Biochemical Genetics focused on disorders of muscle strength and medications that could improve it. The Orometer project grew from the fact that oral functions during feeding are the only parameter that infants can control. From the first rough prototype to the present, the company now finds itself with a device that has been patented, which appears to offer substantial advantages over current technologies for assessment of infant feeding and neuromuscular coordination. Having shown clear clinical results, we wish to proceed to commercialization.

**Target Market(s):** All hospitals world-wide with nurseries and major pediatric units for both in-and out-patients. All specialists who deal with problems of infant feeding and/or developmental problems.

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Key Value Drivers

**Technology:** In spite of the fact that many researchers have custom-made devices for feeding assessment in their own work, the Orometer appears to be the only device specifically designed for development as a routine tool for use in clinical practice. The Orometer itself is a small pressure chamber made of Lexan polycarbonate and is extremely rugged. The pressure detector is also commercially available but the data conditioning and analytical systems are designed and prototyped by the Company. The whole device uses commercially available bottles and nipples.

**Competitive Advantage:** Unlike the evaluation of many other physiological functions that are amenable to quantitative analysis, [e.g: EKG, EEG, EMG, EOG etc], there is no other device that is designed to provide the same kind of quantitative analysis of infant feeding. Our patent, plus successful conclusion of the basic design and clinical results should ensure a very substantial lead on potential competitors.

**Plan & Strategy:** Extend clinical studies, optimize device design and find a strategic partner. Technology funded by the NIH SBIR program.

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Product Pipeline

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<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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<tr>
<td>Initial development</td>
<td>COMPLETE</td>
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<td>Proof of Concept</td>
<td>COMPLETE</td>
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<td>Extended R &amp; D clinical and device</td>
<td>COMPLETE</td>
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<td>More extensive clinical studies/statistical analyses</td>
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<td>Final design, testing and commercialization</td>
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<td>New assessment tools, including Orometry combined with VFSS, Breathing Monitoring, and Continuous Flow Measurement</td>
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Management

**Leadership:**
Neil Buist, MD, President
Scott Buckley, Chief Technology Officer
Sylvia Hathaway, Financial Officer
Marlin Wilson, Strategic Planner

**Scientific Advisory Board:**
Brian Rogers MD. Professor Pediatrics, Director Child Developmental and Rehabilitation Center, Oregon Health & Science University [OHSU]; Internationally known expert in feeding disorders of infancy
Sudge Budden MD. Professor Pediatrics, OHSU and Chief, Child Developmental Center, Emanuel Children's Hospital, Portland OR.
Susan Winter MD. Professor Pediatrics, University of California San Francisco. Director Medical Genetics Center, Children's Hospital of Central California, Madera, CA.