EXECUTIVE SUMMARY

Management Team:

Rachael Hagan, M.Sc.
President & CEO, Chairman
Recognized leader with
demonstrated track record of
commercializing early-stage
technology out of universities.

Jeff M. Sands, M.D.
Founder, Director
Director, Emory Renal Division,
Professor of Medicine and
Physiology,
President Elect, American
Physiological Society, Key Opinion
Leader for NDI.

Janet D. Klein, Ph.D.
Founder
Associate Professor of Medicine
and Physiology
Renal Division, Emory,
Recognized leading expert on the
cellular and molecular mechanisms
that contribute to changes in water
and solute homeostasis that occur
in systemic and kidney diseases.

Ish Khanna, Ph.D.
Founder, Director
Over 28 years of pharmaceutical
industry experience,
Co-inventor of celecoxib and
multiple clinical agents across
therapeutics.

Ram Pillarisetti, Ph.D.
Founder
Over 23 years of experience in
research in Academia and Industry.

Donna See,
Director
CBO, TARA Biosystems, Inc.
Former Vice President at Allied
Minds,
14 years of experience in academic
technology transfer, public-private
partnerships, and early-stage
technology development.

Overview: NephroDi Therapeutics, Inc. is an early-stage pharmaceutical company that focuses on concentration disorders of the kidney. The initial clinical indication for its orally administered lead small molecule is for Nephrogenic Diabetes Insipidus in children, a pediatric orphan indication.

Need: Nephrogenic Diabetes Insipidus (NDI) is a disease where patients produce extremely large amounts of dilute urine resulting from an inability of the kidney to respond to vasopressin. Congenital NDI in the pediatric population results primarily from mutations in the type 2 vasopressin receptor (stimulating mechanisms that concentrate the urine and maintain water homeostasis in the organism), which is located on the X chromosome. Congenital NDI has a profound impact on children. Since these children can produce up to 20 Liters of urine per day, they must drink 20 L of water per day to avoid dehydration. Children who suffer multiple episodes of severe dehydration often end up with mental retardation, which can be prevented with adequate water intake.

NDI should not be confused with diabetes mellitus (i.e. sugar diabetes). Despite the similar name, the two conditions are completely different. Diabetes is an abnormal state marked by passage of excessive amounts of urine. NDI does not involve disorders of blood-glucose control.

Congenital NDI manifests at birth and is a life-long condition with a normal life expectancy. It is considered an orphan condition in the US and Europe: the best estimate is that for every 1 million males born in the US, four are likely to have X-linked congenital NDI.

Currently there is no effective therapy for NDI. Current management requires patients to drink as much fluid as they excrete to prevent dehydration. Patients are also prescribed a thiazide diuretic and must maintain an extremely low sodium diet (0.5 g/day). While often onerous, especially the ultra-low-sodium diet, these measures are minimally effective. They may also be prescribed non-steroidal anti-inflammatory drugs or NSAIDs, but these can cause additional kidney damage with chronic use. To maintain a semblance of a normal lifestyle, NDI patients can succumb to the temptation to void less frequently. This behavior can result in an enlarged bladder, which can cause an obstructive nephropathy and lead to kidney failure. There is a compelling clinical need for an effective therapy. A therapy that significantly reduces urine output would be a tremendous benefit to children suffering from NDI.

Product: Our lead product, NDI-5033 is a unique adenosine monophosphate activated kinase (AMPK) activator that can stimulate water reabsorption without causing hypoglycemia. NDI-5033 is currently entering preclinical development.
**Financing:**
$224,960 Coulter Fund  
$109,181 GA Research Alliance  
Seeking $3M Seed

**Use of Funds:**
We are raising $3M Seed for IND enabling studies for NDI-5033  
$12M Series A to complete clinical trials  
$5M Series B to file NDA submission and launch product

**Intellectual Property:**
Exclusive intellectual property rights, including composition of matter and method of use claims, obtained from Emory University and Kareus Therapeutics, LTD

**Exit Strategy:**
Seeking Rare Pediatric Disease Priority Review voucher for resale  
Seek follow-on indication of use

Our goal is to demonstrate the value of our technology and then sell the company.

**Business model:**
We aim to create substantial shareholder value through the following business strategies:

**Rapid go-to-market strategy in an orphan indication** – Our objective is to reduce investor risk by following the shortest path to clinical validation and FDA approval of our first product, NDI-5033. We intend to file an IND, complete Phase 1 studies and conduct a single 21 patient Registration Trial involving pediatric subjects with NDI. We believe this strategy, utilized in other orphan diseases, will result in convincing safety and efficacy and lead to an accelerated regulatory approval. Major benefits of this strategy include the following:

- This indication has clearly defined objective endpoints, permitting unambiguous clinical trial results.
- The duration of therapy to an endpoint is short, allowing for short clinical trials.
- The trials will be relatively small, which means faster patient recruitment, lower development costs and a more efficient use of capital.
- Given the unmet need and disease severity, the time to market will be accelerated by Orphan Drug and Fast Track status.
- NephroDI may be eligible for a Rare Pediatric Disease Priority Review voucher.

**Use a Semi-Virtual Organization for Capital Efficiency** – We plan to develop NDI-5033 to IND filing, all for $3M of investment, by utilizing an organization of minimal full-time employees aided by a network of experts. We believe this ability to work as a nearly virtual organization is a core strength that will greatly magnify the impact of additional invested capital.

**Market factors:**
We calculate the X-linked NDI Total Addressable Market as $400M annually

- Assumes median prevalent population of USA, CA, EU5 and JP
- FDA rare pediatric disease priority review voucher worth $100M+

**Development Plan:**

![Development Plan Diagram]

**Contact Information:**
Rachael Hagan, President & CEO  
206.696.0546  
rhagan@nephrodi.com

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