

## **Executive Summary**

- Leading biopharmaceutical company targeting the discovery, development, and commercialization of next generation therapeutics targeting the APE1/Ref-1 pathway
- APE1/Ref-1 is specifically involved in a variety of inflammatory, vascular, and neurologic diseases
- Safety profile of lead molecule – APX3330 – has been established in 12 clinical studies and ~380 patients in multiple early phase clinical studies targeting hepatitis, cancer, and eye
- Positive phase 1 study in solid tumors demonstrated a 30% response with APX3330
- APX3330 has shown novel activity in reducing inflammation, improving intestinal function, and protecting enteric nerves in preclinical studies for irritable bowel disease (IBD)
- Goal is to rapidly advance APX3330 into two phase 1b clinical studies to establish safety and proof-of-concept for both Crohn's Disease (CD) and Ulcerative Colitis (UC) over the next 12 to 18 months
- Company holds multiple patents for APX3330 and has developed a pipeline of new molecules targeting Ref-1/APE-1 with exclusivity out to 2039+
- Company has license agreement for APX3330 targeting eye and diabetes indications with OcuPhire Pharmaceuticals with phase 2 readout in Q4 2022
- Business strategy is to license APX3330 for other indications and advance pipeline of new molecule into clinical development

## **Recognized Expertise in a Novel Biological Pathway: APE1**

The APE1/Ref-1 protein effects redox signaling of multiple transcription factors involved in cancer cell growth and survival, including NF-KB, STAT3 and HIF1. Scientific founder, Dr. Mark Kelley is a recognized expert in this biological pathway, receiving numerous research grants and evaluating activity in numerous cancers and non-cancer areas, including ophthalmology and inflammatory bowel disease (IBD).

## **Lead Candidate – APX3330 – Clinical Stage Ready for IBD**

APX3330 has been shown to reduce inflammation, protect enteric neurons, and improve GI function in numerous preclinical studies of IBD. In consultation with leading experts and key opinion leaders, company is poised to evaluate APX3330 as a novel therapeutic in a set of phase 1b clinical studies for Crohn's Disease (CD) and Ulcerative Colitis (UC).

## **Clear Milestones and Efficient Plan to Significant Value Creation in IBD**

- ✓ APE1/Ref-1 pathway has been established in several preclinical models of IBD
- ✓ APX3330 has been shown to reduce inflammation, protect neurons, and improve GI function providing novel activity with breakthrough potential
- ✓ Published positive data for use of APX compounds in IBD indication
- ✓ Maximum tolerated oral dosing for APX3330 is well established
- ✓ Active and engaged set of global experts and key opinion leaders for IBD
- ✓ APX3330 clinical stage ready for phase 1 trials in CD and UC

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## **Preclinical Highlights**

- Single agent efficacy in various robust models
- Inhibition of APE1 “node” allows for use in multiple indications and diseases
- Target multiple key pathways regulators such as: NFkB, STAT3, HIF1, others
- Novel findings for inflammatory bowel disease (IBD)

## **Clinical Highlights:**

- Confirmed clinical safety
- Phase 1 cancer study completed
- Phase 2b study in DR and DME completed
- Phase 1b ready for CD and UC

## **Leadership Team:**

**Tim Tichenor – CFO / Advisor:** CFO and is co-Founder for YourEncore, Inc. and Apexian Pharmaceuticals. Managing Director for Pearl Street Venture Funds.

**Mark R. Kelley, PhD – CSO:** Professor and Associate Director IU Comprehensive Cancer Center, over 30+ years research on APE1/Ref-1 biology.

**John Barnard – Board Executive** Managing Director of Pearl Street Venture Funds with extensive experience developing and exiting early stage companies.

**Rich Messmann, M.D. – CMO** Exec Med Director and Global Development lead for Amgen, former VP Medical Affairs at Novartis and CMO of ProNai Therapeutics, drug-development experience at Endocyte, Eli Lilly, NCI.

**David Broecker – Board Executive** Experienced biotech executive with track record of venture formation and fund raising. Founder/CEO of Zorion Medical. Former CEO of Alkermes and executive with Eli Lilly.