

DEVELOPING RMJH-111B: A NEW CATEGORY OF CARDIOVASCULAR DRUGS

COMPELLING NOVEL NEW DRUG... NEED, NOVELTY, EVIDENCE, ROADMAP

- Big unmet need for safer, effective blood pressure Rx
- 25+ million initial candidates (US)
- Novel technology provides threefold enhanced active agent bioavailability
- Strong global issued IP with protection for platform and pipeline
- New hypertension category allows for value-based payor negotiation
- Successful Phase 1 / 2 trial with FDA agreement on new drug approval roadmap
- Pivotal Phase 3 trial designed for rapid completion and expedited approval

RMJH-111B UNIQUE OPPORTUNITY

- 1st drug candidate applying globally patented inverted micellar nanodroplet technology to enhance bioavailability and benefits
- Initial target market 25+ million people on thiazide-like diuretics.
 - Initially... as adjunct to chronic use approved medication (sooner and easier initial approval).
 - RMJH-111B helps open tiniest blood vessels that existing anti-hypertensives do not reach.
 - Multiple drug indications, multi-medication combos and polypills. This doubles the peak sales years.
 - Pipeline and platform of additional drug indications included.

FROM ADJUNCT TO ALL CARDIOVASCULAR+

- Successful Phase 1 / 2 study resulted in FDA agreement on...
 - Single Phase 3 pivotal trial of 1,000 completed cases.
 - Pivotal trial can be completed within one year from first subject enrolled.
 - Expedited drug approval using 505(b)(2) pathway.
- Supplemental drug approvals are planned for:
 - Additional indications,
 - Special populations and
 - Other applications of the core technologies in Phase 4, post market surveillance.

RMJH-111B 'REINVENTS' MAGNESIUM

Company has exclusive rights to 'nano-droplet' technology through composition of matter patent (US Patent #8,017,160). Claims include enhanced uptake and chaperoned delivery of oral magnesium to cells hungry for this essential mineral.

Novel Magnesium Nano-droplets Other Mg formulas Ligand-binding domain Ligand-binding pockets Ca/Mg Ligand-Gated lon channel Ca/Mg Ligand-Gated Gut ATPase neutral (inhibited easily) Channel

Softgel novel trade secrets

- Charge-neutral stable nano-droplets (micelles, tiny drops) are formed taken up by neutral cell channel pores
- Enhances magnesium uptake even when the usual calcium/magnesium ATPase uptake ion channel is saturated
- Stable softgel with long shelf-life
- Safety, tolerability & efficacy data from Phase 1 / 2 clinical outcome trial support company's approval roadmap

http://en.wikipedia.org/wiki/Endomembrane_system

PHASE 1 / 2 TRIAL RESULTS AND CONCLUSIONS

- Initial study confirmed strong trend with correlation between improvement in serum magnesium and blood pressure reduction.
- No adverse events; well tolerated
- Benefits observed across the active group
- On post study analysis, statistical significance (necessary for New Drug Approval) would have been achieved if just 100 people had been studied
- FDA agrees that Phase 2 is complete and clinical study report is sufficient to proceed to a single Phase 3 trial addressing all requirements for new drug approval (NDA)
- Forward plans include supplemental new drug applications for essential high blood pressure (eHBP) and other cardiovascular indications during Phase 4 (post market surveillance).

PHASE 3 PIVOTAL STUDY DESIGN

- Parallel, double-blind study, N=1,000 finished cases
 - 3:1 randomization, 750 on RMJH-111B + 250 on placebo
 - 10 weeks double blind treatment
 - 10 weeks open-label extension
 - 8 weeks randomized withdrawal of responders
 - 42 weeks to exit trial; 5% sample for 24° blood pressure measurement
- Clinic seated systolic and diastolic pressure as primary end points; other objectives to address clinical, payor, and consumer needs
- Serum magnesium is a generally available, inexpensive test to confirm need, efficacy and safety
- Enhanced arteriolar magnesium helps both healthier BP & kidneys

PHASE 3 PIVOTAL STUDY DESIGN (DE-RISKED)

- Clinical risk minimized with substantial increase in number of participants warranted by literature and Real-World Experience with magnesium
 - Careful planning and design addresses all aspects needed for NDA.
 - Strategic design supported by end of Phase 1 / 2 FDA meeting minutes.
 - WCT (Worldwide Clinical Trials under Dr Neal Cutler) will serve as CRO with trial designed to commence within 3-4 months of funding.
 - RMJH's team includes members who pioneered other hypertension drugs such as beta-blockers and ACE inhibitors.
 - Other members of RMJH's team edit the hypertension clinical management guidelines used to guide payors and policy experts.
- The most recent guidelines (2017) call for earlier treatment of high blood pressure starting now at 120/80 rather than 130/90.

DE-RISKED PHASE 3 STUDY AND NDA ROADMAP

- Statistical design for the trial includes 300 additional patients
 - Study overpowered by design to achieve 'once and done' drug approval.
 - The initial 300 participants to complete the full protocol will be rerandomized to assess adaptation (technically tachyphylaxis) over an additional eight weeks.
 - Participants will return two weeks after completing the trial for safety and final assessments. This once and done design reduces costs and time.
- FDA agrees that RMJH has built a 505(b)(2) bridge to the approved IV magnesium for this innovative, oral administration.
- 1st in and out of clinic to become first new drug hypertension category in 30+ years

RMJH-111B PLATFORM AND PIPELINE, EACH WITH DISTINCT LOOK, FEEL, DOSAGE AND FORM

Cardiovascular drug Platform:

- Essential hypertension starting with thiazides [Rx sooner & easier]
- Better blood lipids
- Atrial Fibrillation
- Congestive Heart Failure (CHF)

Inadequate
hypertension control in
people on diuretics is

1st indication for faster
drug approval.

Follow-on Pipeline of Indications

- Preeclampsia and eclampsia of pregnancy
- Muscle cramps, restless legs, facial ticks & twitches
- Diabetes, metabolic syndrome & insulin resistance
- Kidney disease
- Osteopenia / Osteoporosis
- Migraine headache
- Sickle Cell Anemia (Orphan Drug candidate)
- Platinum Chemotherapy (cis-platinum et al...)

ADVISORY BOARD / CLINICAL STUDY REGULATORY LEADERS

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