THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER

Request for Proposal

Pre-Clinical Studies of a Novel ER-Beta Agonist Small Molecule: WT-IV-012

Deadline: Monday, September 17, 2018 at 5:00pm

Summary

The OSU Drug Development Institute (DDI) in collaboration with the College of Medicine and the Center for Clinical and Translational Sciences are working together to sponsor a pilot project to generate pre-clinical data with a novel, selective Estrogen receptor Beta (ERb or ESR2) agonist WT-IV-012. This effort seeks to identify between 5 to 15 worthwhile proposals to perform pre-clinical work with this compound focused on generating data that will be useful for eventual decisions relative to clinical application of this agent. Each proposal may request up to $50,000.

WT-IV-012 demonstrates selectivity of ERb: ERa = 46:1, has acceptable pharmacology properties including being orally bioavailable, brain penetrant and lacking ADME related issues. This molecule has a cellular EC_{50} of 26 nM toward the ERb receptor (ESR2). Strong intellectual property around the lead compound exists at OSU and additional modification of lead compound is possible to further improve the therapeutic index of this molecule if necessary. This RFP specifically seeks proposals that will utilize this small molecule for pre-clinical experiments (in vitro and in vivo, preferably both) that will form the basis for additional investigation around non-cancer and cancer related indications for its eventual application.

Areas of therapeutic interest:

Non-cancer applications	Cancer-related applications
• pulmonary hypertension • anxiety linked behavior including OCD • non-alcoholic steatohepatitis (NASH) induced cirrhosis • neuropathic pain from chemotherapy • nicotine or opioid withdrawal • sepsis • inflammation (inflammatory bowel disease, rheumatoid arthritis; multiple sclerosis) • cardiovascular (heart failure, protection from myocardial infarction) • neurologic (Parkinson's disease; ischemic brain injury, improvement in cognitive function with psychotropic agents) • endometriosis or hot flash related symptoms of estrogen withdrawal • other areas for which justification of pre-clinical therapeutic application of this agent can be made • Submissions for any area related to women's health is strongly encouraged.	• androgen resistant prostate cancer • breast cancer • Hodgkin's disease • anaplastic thyroid cancer • lung cancer • colon cancer • ovarian cancer • graft versus host disease • skin cancer (melanoma and non-melanoma) • large cell lymphoma • hepatocellular carcinoma • gastric carcinoma • Other appropriate types of cancer for which target validation is justified Efforts are ongoing right now to further refine this.

Investigators will have freedom to utilize data obtained for submission of peer reviewed grants, presentations and publications (once appropriate patents are submitted), and potential additional funding for promising leads that could result in commercialization of this agent.

Eligibility

1. Faculty with PI status at The Ohio State University, with no restriction on College, academic rank or type of faculty;
2. Expertise in proposed area with established (ideally published) in vivo models for which rapid testing can be performed;
3. Willingness of investigator to actively participate in project management with DDI and CCTS;
4. Willingness of investigator to provide data in timely manner that will be kept confidential but may be provided to pharmaceutical sponsors for potential out-licensing opportunities;
5. Willingness to participate with patent attorney and staff on any use patents coming forth from this work as inventors;
6. Willingness to utilize validated reagents (antibodies, etc. to validate specific target in normal or cancer tissue) that will be provided for select studies;
7. Ability to complete proposed experiments within 12 months.

Award

1. Successful applicants will receive up to $50,000 funding to support personnel, equipment and supply costs related to the project.
2. No PI salary support may be taken for this award
3. Potential for renewal and expansion of funding based upon progress and promise of project
4. Project management support provided by CCTS or DDI to each successful proposal.

Research Proposal

1. The research proposal document must be written in single spaced 11 point Arial font, with margins of 0.5 inch. There is a three page maximum limit, excluding bibliography. Investigator NIH biosketch required with emphasis on experience in area of proposed research.
2. Suggested Headings:
   - Title
   - Specific Aims
   - Background and Significance
   - Preliminary Investigation (not required)
   - Experiment Design Methods

Selection Process

1. Proposals will be rated on a) scientific merit; b) feasibility to complete; c) impact to public health; d) impact to commercialization process
2. Email the research proposal and NIH-format biosketch for each person involved in the project to:
   Kristen.Cole@osumc.edu
3. **Deadline: Monday, September 17, 2018 at 5:00pm.** Other applications may be considered after this date if they have high merit and build upon the drug development efforts of this compound.
4. Notifications will be delivered no later than Friday, November 2, 2018.
5. Final selection will be made by a committee appointed by the DDI and OSU CCTS.

Questions? Send inquiries to:

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