

CATEGORY 1 DURC-PEPP EXPERIMENTAL OUTCOME ASSESSMENT

Research within the scope of Category 1 are those experimental outcomes with a biological agent or toxin outlined in Section 4.1.1 that are reasonably anticipated to:

- i. Increase transmissibility of a pathogen within or between host species;
- ii. Increase the virulence¹⁹ of a pathogen or convey virulence to a non-pathogen;
- iii. Increase the toxicity of a known toxin or produce a novel toxin;
- iv. Increase the stability of a pathogen or toxin in the environment, or increase the ability to disseminate a pathogen or toxin;²⁰
- v. Alter the host range or tropism of a pathogen or toxin;
- vi. Decrease the ability for a human or veterinary pathogen or toxin to be detected using standard diagnostic or analytical methods;
- vii. Increase resistance of a pathogen or toxin to clinical and/or veterinary prophylactic or therapeutic interventions;²¹
- viii. Alter a human or veterinary pathogen or toxin to disrupt the effectiveness of preexisting immunity, via immunization or natural infection, against the pathogen or toxin; or
- ix. Enhance the susceptibility of a host population to a pathogen or toxin.

¹⁹ E.g., the ability of a pathogen to cause disease

²⁰ E.g., improving characteristics of the pathogen or toxin such as environmental stability and aerosolubility

²¹ E.g., antimicrobials, antivirals, antitoxins, vaccines