

28/11/2019

**PI:** Kristian Aquilina

**R&D number:** 19BI18

**Title:** Algorithmic Machine Learning on Ultrasound Images for Hydrocephalus Prediction in Neonates (MLHP)

Dear Kristian,

Thank you for your response to our letter regarding your CRAC application. We recognise that your study is applying open source software to test algorithmic machine learning in identifying neonatal hydrocephalus from ultrasound images.

We acknowledge the clarification points made in your letter. This is a retrospective feasibility study and the numbers are necessarily low, although they may still be too small to establish “whether the algorithm works”.

If the clinical team perform the anonymization step, and the research team receives anonymized data, then ethical approval is unlikely to be required. You have involved a neuro-radiologist to help define hydrocephalus on neuro imaging, although a practitioner in cranial US could also be sought. As the software is open access, there is no IP residing within GOSH or UCL in the foreseeable future, but IP partnership has been discussed.

**Decision: Approval**

Good luck with your feasibility study; please liaise closely with R&D if there are any changes to your study protocol.

Regards,



Dr Owen Arthurs  
**Chair, Clinical Research Adoption Committee**

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