Purpose:

To our knowledge up to now there exists no external quality control program for ACT testing with the MEDTRONIC ACT (plus) instruments. Quality control is an essential part of good clinical practices and an obligation for accreditation according to ISO 15189 or ISO 22870 standards. To our knowledge there is worldwide no existing performance scheme for these tests.

Methods:

We evaluated the possibility to use the internal quality control that is provided by Medtronic. In order to enlarge the range of reported results we looked at different dilution options and its effect on the reported results and the reproducibility of the obtained values.

A second approach was the evaluation of the use of a commercial available quality control material from BioRAD: EQAS coagulation program. There are no results available for ACT testing in the inserts of this QC. The material is part of an existing external proficiency scheme with electronic data entrance and online evaluation and reporting.

Results:

The first samples were send out in the spring of 2016 and the results will be presented at the CPOCT conference in Denmark in September 2016.

Conclusions:

We present the first results of an external QC program for ACT testing with Medtronic ACT(plus) instruments that was organized for the first time in the spring of 2016 in Belgium using the by Medtronic provided internal QC material at different dilutions.

We established also the suitability of another commercial third party proficiency schedule from BioRAD. This material is also acceptable for international use with ACT Medtronic devices. The availability of this material worldwide in an existing EQAS schema for coagulation with the possibility for electronic data entrance and reporting makes this a very attractive although more expensive solution.