

Schiller BR-102 Plus – Erratum

Denchev SV, Simova II, Mateev MG. Evaluation of the Schiller BR-102 plus noninvasive ambulatory blood pressure monitor according to the International Protocol introduced by the Working Group on Blood Pressure Monitoring of the European Society of Hypertension. *Blood Press Monit* 2007; **12**:329-333.

dabl Educational raised the following queries relating to the above paper:

Query It is unclear whether the device validated by Denchev et al was the Schiller BR-102 Plus or the older Schiller BR-102. On their web page, Schiller describe the following the Schiller BR-102 Plus as featuring “*Easy menu guidance with two control buttons*”, “*Voice recording of patient data*” and “*Examination of adults and children thanks to a special algorithm*”. This reference to “*a series of touch keys*” would appear to apply more to the Schiller BR-102 rather than the Schiller BR-102 Plus. This older, now obsolete, device was validated in 1999 using the BHS protocol where it passed in auscultatory mode but failed in oscillometric mode.

Response In an early stage, the old BR-102 device was used for signal acquisition. The acquired signals were then analysed by the BR-102plus blood pressure measurement algorithms in an offline arrangement. As soon as the new device was available, all the measurements were taken and also analysed directly by the BR-102plus. All the final study results are exclusively based on measurements with the new BR-102plus.

Response 2 *Paper reviewer’s report passed on to dabl Educational.*

Query dabl Educational accept the results of the paper and that the device that was validated did pass and could be recommended. However, dabl Educational have also observed that the description of the device provided in the paper as being the BR-102 Plus does not match the description and image of the BR-102 device advertised by Schiller.

You have provided the following explanation: “In an early stage, the old BR-102 device was used for signal acquisition. The acquired signals were then analysed by the BR-102plus blood pressure measurement algorithms in an offline arrangement. As soon as the new device was available, all the measurements were taken and also analysed directly by the BR-102plus. All the final study results are exclusively based on measurements with the new BR-102plus.”.

This does not explain why the description of the device in the paper is that of a device looking similar to the BR-102 and is very different from the BR-102 plus.

dablEducational notes that there appears to have been significant changes to the hardware used to acquire the signals at some point during the study. Such changes are regarded, independently of the software, as essentially defining a new device.

Response The information in dablEducational remark is true concerning the whole development process of the BR-102 Plus. Previous recordings with the old BR-102 were acquired earlier within a different context from different people.

The team that evaluated BR-102 Plus has never used previously collected database with the old BR-102 device. We made a full contingent of patients, needed for the evaluation, using only BR-102 Plus in the Cardiology Clinic, University Hospital Aleksandrovska.

The paper published in Blood Pressure Monitoring is about the evaluation, but not for the developing of BR-102 Plus. For that reason our opinion is that the “omission” in the paper is not sufficient. Furthermore we were not in contact with the Developing team during the evaluation, and were not aware of that fact.

The description of BR-102 Plus contains just few sentences concerning the presence of microphone, rechargeable batteries, inflatable cuffs with bladders (small, medium and large) and universal serial port for connection with PC. For the above said the description of BR-102 Plus looks similar not only to BR-102, but also similar to other BP monitors made by other companies. The only problem (done probably because of copy-paste) is that instead of “two touch keys” we have written “a series of touch keys”.

The BR-102 Plus hardware and software have not been changed during the study and afterwards.

Conclusion dabl Educational accepts that the Schiller BR102 Plus was the device validated.