**Favipiravir and Ribavirin Treatment of Epidemiologically Linked cases of Lassa Fever**

**Supplement 1: Details of laboratory testing**

Patient E: RNA was extracted from patient whole blood or other body fluid specimens (urine, saliva, semen and sweat) using the MagMAX™ Pathogen RNA/DNA Kit (ThermoFisher Scientific) as previously described (Flint, Goodman et al. 2015). Lassa virus was detected using previously described RT-PCR assays targeting regions of the L [20] and S [21] genomic RNA. Both PCR fragments were sequenced by the Sanger method using the BigDye Terminator v3.1 Cycle Sequencing Kit (Thermofisher Scientific). Based on the sequence of the S-fragment a real-time RT-PCR assay (LV-Tog2) was developed. 25µl reactions were prepared according to the SuperScript™ III Platinum™ One-Step qRT-PCR Kit (Thermofisher Scientific) instructions with 5µl template RNA, and 1µM final concentration of primers LV-Tog2 F (TCACAACTCATCGCCTCATAC) and LV-Tog2 R (AATCTGTATGACCACGCACTC) and 100nM final concentration of probe LV-Tog2 P (56-FAM/TCCATCTGT/ZEN/CCATCCCAAACTTCAACC/3IABkFQ.

The cycling conditions were: 15 min at 50°C, 2 min at 95°C, 40 cycles including 15 sec at 95°C and 30 sec at 60°C. All primers were purchased from IDT (Coralville, IA, USA). Lassa-specific antibodies were detected in whole blood using an IgM capture assay and an IgG indirect ELISA assay as previously described [22].Viral isolation from patient body fluid samples was performed in the BSL-4 laboratory using an aliquot of patient sample inoculated onto Vero E6 cell culture monolayers in 25-cm2 plastic tissue culture flasks as previously described [22].

Patient F: For the Togo-strain specific RT-PCR (LV-Tog1), RNA was extracted from the samples using a viral RNA mini kit (Qiagen). A 25-μl reaction was set up containing 5 μl of RNA, 5 μl of 5X reaction buffer, 1µl dNTP mix, 1µl enzyme mix provided with the One step RT-PCR system (Qiagen), 600 nM concentrations of primer Afor (CCACATgTTgCCACATTgTAgA) and primer Arev (TCTTCCAggAggTTCCTCATgT), as well as 200 nM of probe Aprobe ([FAM])-ATAgAggAggTgATgAACATTgTTCTgA-6-carboxy-[BBQ]). All oligonucleotides were synthesized (Tib-Molbiol, Berlin, Germany). In-vitro transcribed RNA controls were used for quantification. Clinical laboratory diagnostics included point-of-care clinical chemistry (Piccolo Express, Abaxis, Union City, CA), blood-count (Sysmex, Norderstedt, Germany), blood-gas (ABL, Radiometer, Willich, Germany) and bacteriological analyses and were also performed as point-of-care testing at hospital’s high-level isolation unit. Lassa Virus PCR (LV-PCR) was performed at the Institute of Virology, Philipps University, Marburg, Germany in biosafety level 4 (BSL4) conditions.