**Title: Frequent detection of severe acute respiratory syndrome coronavirus 2 RNA on hands and skin of patients with coronavirus disease 2019**

**Authors**: Sarah N. Redmond MD1, Daniel F. Li MD,1,2 Muhammed F. Haq MD2, Lucas D. Jones BS3, Alexandria M. Nguyen MSHS4, Margaret Tiktin DNP4, Jennifer L. Cadnum BS3, Maria E. Navas MD5, Jessica Bingham RN6, Brigid M. Wilson PhD7, and Curtis J. Donskey1,7

**Supplementary file**

***Polymerase-chain reaction (PCR) for SARS-CoV-2 RNA***

RNA was extracted from specimens with the QIAamp Viral RNA Mini Kit (Qiagen) according to the manufacturer’s instructions. For RT-qPCR amplification of RNA, the Luna Universal One-Step RT-qPCR kit (New England Biolabs) was used. A CFX 96 Touch Real-Time PCR Detection System (Bio-Rad) thermocycler was used to quantify the amount of viral RNA present in each sample. To detect low copy number contamination, primers were designed flanking the Centers for Disease Control and Prevention (CDC) N1 probe binding site and validated to minimize the nonspecific amplification that occurs intermittently with the CDC N1 primers at a Ct value of approximately 35.1 The primers were: SR\_nCoV\_N1-Fwd1 CTAAAATGTCTGATAATGGACCCC; SR\_nCoV\_N1-Rev2 gcgttctccattctggttactgcc. The CDC N1 probe was used: 2019-nCoV\_N1-P 5’-FAM-ACC CCG CAT TAC GTT TGG TGG ACC-BHQ1-3’. Viral load was calculated in comparison to a standard dilution series of purified SARS-CoV-2 RNA (NR-52286 from BEI Resources).

**Reference**

1. Jaeger LH, Nascimento TC, Rocha FD, et al. Adjusting RT-qPCR conditions to avoid unspecific amplification in SARS-CoV-2 diagnosis. *Int J Infect Dis* 2021;102:437-439.