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Changes of the gut microbiome in CFS patients in response to whole-body cryotheraphy (WBC): WBC a snug as a bug in a rug method to modify gut microbiome in CFS patients?

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Results Introduction 100 Relative abundance (%) • Chronic fatigue syndrome (CFS), also Sobs index of OTU level known as myalgic encephalomyelitis unclassifed (ME) is a severe, debilitating multirare group Subdoligranulum Bifidobacterium organ disease that affects many systems Ruminococcaceae UCG-002 Ruminococcus 2 Ruminococcaceae UCG-014 including the gastrointestinal system. Faecalibacterium Agathobacter Dialister Concerning CFS/ME, different studies Blautia before WBC+SS after WBC+SS Alistipes have shown an altered composition and Bacteroides Figure 1. Index of OTU level a reduced biodiversity in patients gut O CFS O CFS microbiome but until now a relationship 0.4 Control 0.4Control CFS Control CFS Control between the bacterial composition and 0.2 After Before NMDS2 NMDS2 pathogenesis of CFS/ME could not be WBC+SS WBC+SS Figure 2. Taxonomic analysis of the most fully elucidated. -0. -0. common bacterial genera in the gut **Material and methods** microbiome CFS patients vs HC -0.4 -0. 0.0 0.8 0.20.4 0.6 0.8 0.00.2 0.4 0.6 NMDS1 NMDS1 • n=250 recruited patients Figure 3. Result of Permanova analysis among CFS patients **27 qualified** • n=160 did not met ICC and Fucuda compared to controls before and after cryotherapy. CFS patients,

