

SI Materials and Methods

Listed are commercially available ELISAs that we have tested successfully in EPS fluids. These include: *Lactotransferrin* (LTF), *Prostate-specific antigen* (PSA, KLK3), *Prostatic acid phosphatase* (ACPP), *Glutamate carboxypeptidase 2* (FOLH1, PSMA), *Growth/differentiation factor 15* (GDF15), *Sorbitol dehydrogenase* (SORD), and *Neprilysin* (MME, CD10). Direct EPS samples were diluted in water at a ratio of 1:5 for Neprilysin and SORD, 1:10 for GDF15, and 1:40 for lactotransferrin. Lactotransferrin, Neprilysin, SORD and GDF15 levels were quantified using specific ELISA kits (Lactoferrin Human Plasma ELISA kit, USBiological, Neprilysin DuoSet ELISA Development System, Research and Development System, SDH ELISA Kit, USCNLIFE, Human GDF-15/MIC-1 ELISA, Biovendor Research and Diagnostic Products) following the manufacturer's instructions for each kit. For PSA, PSMA, and ACPP, direct EPS samples were diluted 1:100-1:200 (ACPP, PSA) or 1:25 (PSMA) in coating buffer (10 mM NaCl/50 mM NaPO₄, pH 7.5) and incubated overnight in 96-well ELISA plates. Primary rabbit polyclonal antibodies to PSA and PAP (Fitzgerald Industries) were diluted 1:500 and 1:1000 respectively, or a monoclonal antibody for PSMA was diluted 1:250 (clone 7E11) and incubated overnight as previously described. All samples were assayed in duplicate or triplicate.