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ACCEPTED MANUSCRIPT

Friend or Foe? Telomerase as a Pharmacological target in Cancer and Cardiovascular Disease

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Running Title:

Telomerase in Cancer and Cardiovascular Disease

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Non standard abbreviations

ALS: amyotrophic lateral sclerosis

ALT: alternative telomere lengthening

mechanisms

ARIC: Atherosclerosis Risk in Communities

BP: blood pressure

CAD: coronary artery disease

CML: chronic myelogenous leukemia

CVD: Cardiovascular disease

EC: endothelial cells ET-1: Endothelin 1

GWAS: Genome wide association studies

H₂O₂: Hydrogen peroxide ITGB1: integrin beta 1

NNRTIs: non-nucleoside reverse

transcriptase inhibitors

NO: Nitric Oxide

PGC-1a: Peroxisome proliferator-activated

receptor gamma coactivator 1-alpha

PPARy: Peroxisome proliferator-activated

receptor gamma

ROS: reactive oxygen species

SHR: spontaneously hypertensive rats TA: Decreased telomerase activity TERT: telomerase reverse transcriptase TGFB: transforming growth factor beta

TZDs: Thiazolidinedione

VSMC: Vascular smooth muscle cells

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