

**Table 3** Transdermal Hormone Replacement on CVD Risk

Species	Study Type	Subjects	Findings	Citation
Human	RCT	172	TE + IMP tended to improve cardiac autonomic control and prevented age-related changes in endothelial function in postmenopausal women.	Gordon JL, Rubinow DR, Watkins L, Hinderliter AL, Caughey MC, Girdler SS. The Effect of Perimenopausal Transdermal Estradiol and Micronized Progesterone on Markers of Risk for Arterial Disease. <i>J Clin Endocrinol Metab.</i> 2020 May 1;105(5):e2050–60. doi: 10.1210/clinem/dgz262. PMID: 31,838,497; PMCID: PMC7096310. <sup>75</sup>
Human	Randomized pilot trial	57	MP + t-E2 demonstrated a positive effect on traditional CVD markers cardiac output, reduction in diastolic blood pressure, and total peripheral resistance after 12 months	Mittal et al. Impact of micronised progesterone and medroxyprogesterone acetate in combination with transdermal oestradiol on cardiovascular markers in women diagnosed with premature ovarian insufficiency or an early menopause: a randomised pilot trial. <i>Maturitas.</i> 2022. <sup>76</sup>
Human	RCT	596	HT with estradiol plus topical progesterone reduced atherogenic progression of arterial wall composition in healthy postmenopausal women who were within 6 years from menopause	Karim R, Xu W, Kono N, Sriprasert I, Li Y, Yan M, Stanczyk FZ, Shoupe D, Mack WJ, Hodis HN. Effect of menopausal hormone therapy on arterial wall echomorphology: Results from the Early versus Late Intervention Trial with Estradiol (ELITE). <i>Maturitas.</i> 2022 Aug;162:15–22. doi: 10.1016/j.maturitas.2022.02.007. Epub 2022 Mar 17. PMID: 35,474,254; PMCID: PMC92322990. <sup>77</sup>
Human	RCT	5359	Transdermal HRT had a positive effect on flow-mediated dilatation trend towards benefit in non-fatal M.I.	Bontempo S, Yeganeh L, Giri R, Vincent AJ. Use of MHT in women with cardiovascular disease: a systematic review and meta-analysis. <i>Climacteric.</i> 2024 Feb;27(1):93–103. doi: 10.1080/13,697.137.2023.2273524. Epub 2024 Jan 15. PMID: 37,933,495. <sup>78</sup>

**Abbreviations:** RCT, Randomized Controlled Trial; MP, Micronized Progesterone; t-E2, Transdermal Estradiol; HT, hormone Therapy; TE, Transdermal Estradiol; IMP, Intermittent Micronized Progesterone; M.I, Myocardial Infarction.