

**TABLE 63.1**

**Peer-Reviewed Controlled Studies of Skin-to-Skin Chemical Transfer**

Drug/Chemical	Concentration	Dose	Dosage per Area	Vehicle	Application Site and Transfer Site	Transfer Method	Method and Compartment of Drug Measurement	Result	Conclusion	Level of Evidence*	Reference
Estradiol	2.5 mg/g	1.74 g per site	n.s.†	Emulsion	Right and left leg from one individual to right and left forearm of another individual respectively	Application and transfer site rubbed for 2 minutes, 2 hours after application	Blood serum concentration (radioimmunoassay)	Systemic average concentration of estradiol increased from 17.0 ± 4.3 to 21.0 ± 4.4 pg/mL.	Estradiol transferred from the donor to the recipient.	IV	[7]
[ <sup>14</sup> C]-estradiol, [4- <sup>14</sup> C]-NEC-127 estradiol	.6 mg/g	.16 g	9.6*10 <sup>-4</sup> mg/cm <sup>2</sup>	Gel	Left ventral forearm of one individual to ventral forearm of another individual	Application and transfer site rubbed for 15 minutes, 1 hour after application	Urinary <sup>14</sup> C excretion	10.8 ± 7.9 % of the mean percent dose recovered in the recipient.	Estradiol transferred from the donor to the recipient.	I	[2]
Testosterone	25 mg/g	2.5 g or 5 g	.21 mg/cm <sup>2</sup> or .42 mg/cm <sup>2</sup>	Gel	Inner side of forearm of one individual to the back of another individual	Application and transfer site rubbed for 10 minutes, 10 minutes after application	Blood serum concentration (reverse-phase high-performance liquid chromatography and UV-detection)	No increase in the testosterone serum levels of the participants.	Testosterone not transferred at a clinically relevant level.	I	[1]

(Continued)