

SUPPLEMENTARY MATERIAL

Comparison between dutasteride and finasteride in hair regrowth and reversal of miniaturization in male and female androgenetic alopecia: a systematic review

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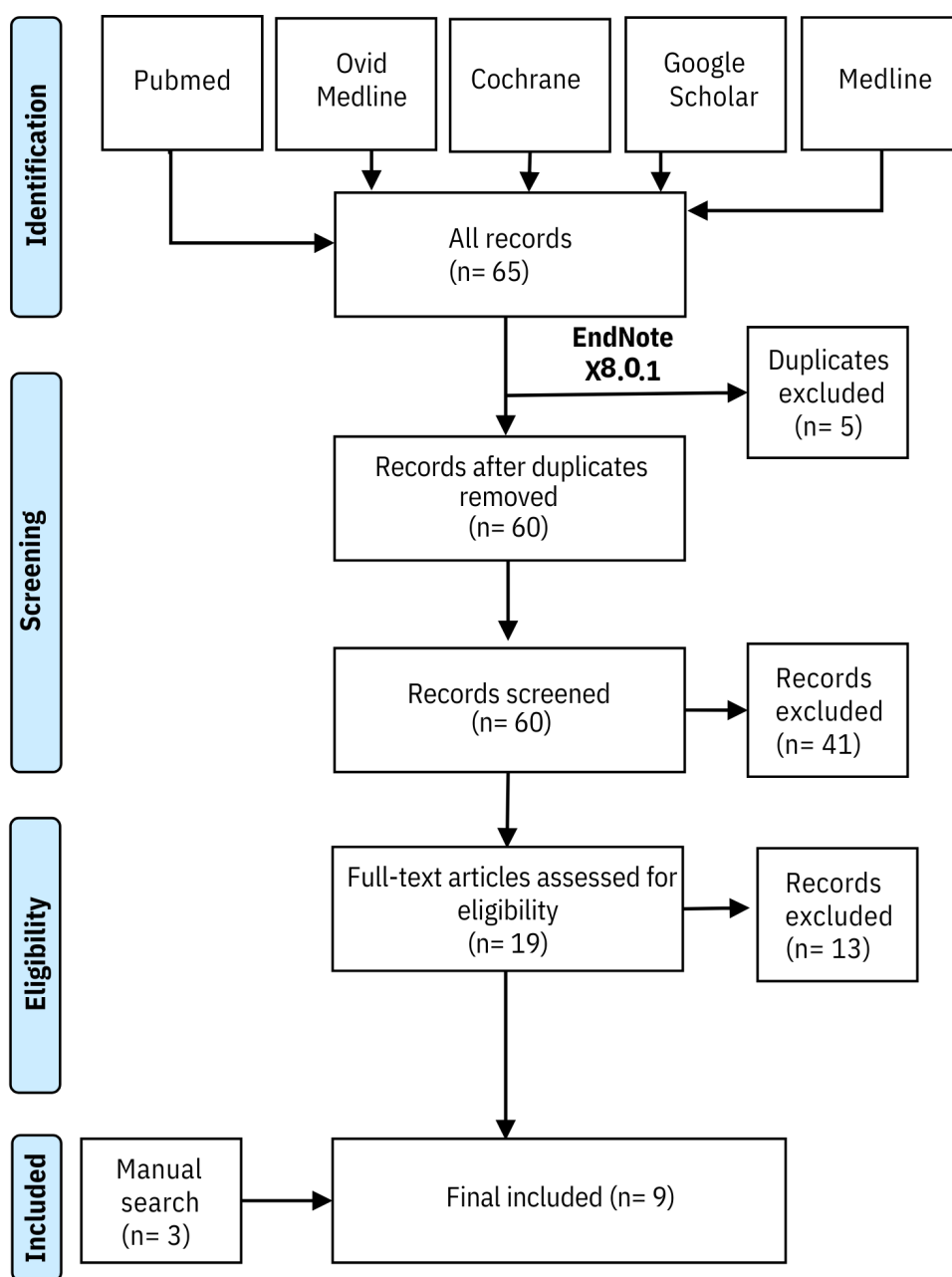


Figure S1. Flow diagram of the selection process.

Table S1. Characteristics of the included studies.

Study ID	Study design	Compared groups (doses)	Sample size	Mean age	Male (%)
Choi-2016-Korea	Prospective cohort	Dutasteride (0.5 mg)	712	29.3	100%
TSUNEMI-2016-Japan	SACT	Dutasteride (0.5 mg)	120	42.2	100%
Eun-2010-Korea	RCT	Dutasteride (0.5 mg)	73	37.8	100%
		Placebo	73	38.4	
Moftah-2012-Egypt	Prospective cohort	Dutasteride (0.5 mg)	86	34.1	0%
		Placebo	40	34.8	
Boersma-2014-Netherlands	Retrospective cohort	Dutasteride (0.15 mg)	60	16-48*	0%
		Finasteride (1.25 mg)	120		
Jung-2014-Korea	Retrospective cohort	Dutasteride (0.5 mg) Finasteride (1 mg)	31	33.7	100%
Shanshanwal-2007-India	RCT	Dutasteride (0.5 mg)	35	18-40*	100%
		Finasteride (1 mg)	37		
Olsen-2006-USA	RCT	Dutasteride (0.05 mg)	71	35.5	100%
		Dutasteride (0.1 mg)	72	36.4	
		Dutasteride (0.5 mg)	68	36.1	
		Dutasteride (2.5 mg)	71	35.8	
		Finasteride (5 mg)	70	38.5	
		Placebo	64	35.8	
Harcha-2013-Singapore	RCT	Dutasteride (0.02 mg)	185	38.5	100%
		Dutasteride (0.1 mg)	188	38.7	
		Dutasteride (0.5 mg)	184	38.6	
		Finasteride (1 mg)	179	38	
		Placebo	181	38.7	

*range, RCT= Randomized clinical trial, SACT= single arm clinical trial.

Table S2. Treatment efficacy.

Study ID	Treatment arms	Hair count baseline (mean (SD))	Hair count post treatment (mean (SD))	Mean change in hair count post treatment	Hair count increase prevalence	Hair thickness baseline (mean (SD))	Hair thickness post treatment (mean (SD))	Hair thickness increase prevalence
Eun-2010-Korea	Dutasteride (0.5 mg)	148.1 (36.3)	162.3 (35.5)*	-	-	-	-	-
	Placebo	144.3 (32.3)	149.6 (34.4)*	-	-	-	-	-
Boersma-2014-Netherlands	Dutasteride (0.15 mg)	-	-	-	-	-	-	81.7%
	Finasteride (1.25 mg)	-	-	-	-	-	-	82.5%
Jung-2014-Korea	Dutasteride (0.5 mg)	87 (12)	96 (12)*	-	-	53 (12)	63 (11)*	-
	Finasteride (1 mg)	84 (13)	87 (12)*	-	-	52 (12)	53 (12)*	-
Moftah-2012-Egypt	Dutasteride (0.5 mg)	-	-	-	60.5%*	-	-	60.5%*
	Placebo	-	-	-	27.5%*	-	-	22.5%*
Olsen-2006-USA	Dutasteride (0.05 mg)	1000 (302)	-	25*	-	-	-	-
	Dutasteride (0.1 mg)	908 (224)	-	79*	-	-	-	-
	Dutasteride (0.5 mg)	928 (220)	-	95*	-	-	-	-
	Dutasteride (2.5 mg)	972 (247)	-	110*	-	-	-	-
	Finasteride (5 mg)	902 (263)	-	76*	-	-	-	-
	Placebo	920 (236)	-	-32	-	-	-	-
Shanshanwal-2007-India	Dutasteride (0.5 mg)	223 (51)	246 (50)	23.8*	-	-	-	-
	Finasteride (1 mg)	227 (49)	231 (50)	4*	-	-	-	-
Harcha-2013-Singapore	Dutasteride (0.02 mg)	774 (226)	-	17*	-	-	-	-
	Dutasteride (0.1 mg)	721 (220)	-	63*	-	-	-	-
	Dutasteride (0.5 mg)	768 (218)	-	90*	-	-	-	-
	Finasteride (1 mg)	764 (181)	-	57*	-	-	-	-
	Placebo	761 (227)	-	-4.9	-	-	-	-

*significant difference

Table S3. Prevalence of AE in the included studies (%).

Side effect	Study ID	Dutasteride 0.02 mg	Dutasteride 0.05 mg	Dutasteride 0.1 mg	Dutasteride 0.15 mg	Dutasteride 0.5 mg	Dutasteride 2.5 mg	Finasteride 1 mg	Finasteride 1.25 mg	Finasteride 5 mg	Placebo
All AE	Eun-2010-Korea	-	-	-	-	49%	-	-	-	-	43%
	Shanshanwal-2007-India	-	-	-	-	23%	-	19%	-	-	-
	Harcha-2013-Singapore	49%	-	51%	-	54%	-	53%	-	-	52%
	TSUNEMI-2016-Japan	-	-	-	-	53%	-	-	-	-	-
	Choi-2016-Korea	-	-	-	-	15%	-	-	-	-	-
Drug related AE	Eun-2010-Korea	-	-	-	-	7%	-	-	-	-	9%
	Harcha-2013-Singapore	48%	-	52%	-	41%	-	48%	-	-	40%
	TSUNEMI-2016-Japan	-	-	-	-	17%	-	-	-	-	-
Serious AE	Eun-2010-Korea	-	-	-	-	0%	-	-	-	-	1%
	Harcha-2013-Singapore	0%	-	2%	-	1%	-	1%	-	-	1%
Sexual dysfunction	Eun-2010-Korea	-	-	-	-	4%	-	-	-	-	3%
	TSUNEMI-2016-Japan	-	-	-	-	3%	-	-	-	-	-
	Choi-2016-Korea	-	-	-	-	0.6%	-	-	-	-	-
Erectile dysfunction	Eun-2010-Korea	-	-	-	-	0%	-	-	-	-	1%
	Shanshanwal-2007-India	-	-	-	-	9%	-	3%	-	-	-
	Harcha-2013-Singapore	4%	-	4%	-	6%	-	5%	-	-	4%
	TSUNEMI-2016-Japan	-	-	-	-	15%	-	-	-	-	-
	Eun-2010-Korea	-	-	-	-	0%	-	-	-	-	1%

Ejaculation disorder	Olsen-2006-USA	-	0%	3%	-	1%	1%	-	-	3%	0%
	TSUNEMI-2016-Japan	-	-	-	-	4%	-	-	-	-	-
	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
libido disorders #	Jung-2014-Korea	-	-	-	-	17%	-	-	-	-	-
	Olsen-2006-USA	-	3%	3%	-	1%	13%	-	-	4%	3%
	Shanshanwal-2007-India	-	-	-	-	3%	-	8%	-	-	-
	Harcha-2013-Singapore	5%	-	5%	-	3%	-	5%	-	-	1%
	TSUNEMI-2016-Japan	-	-	-	-	8%	-	-	-	-	-
	Choi-2016-Korea	-	-	-	-	1.3%	-	-	-	-	-
	Olsen-2006-USA	-	3%	0%	-	0%	0%	-	-	1%	5%
Impotence	Choi-2016-Korea	-	-	-	-	1%	-	-	-	-	-
	Pain	Moftah-2012-Egypt	-	-	-	83%	-	-	-	-	80%
Headache	Moftah-2012-Egypt	-	-	-	-	22%	-	-	-	-	30%
	Harcha-2013-Singapore	4%	-	4%	-	6%	-	3%	-	-	9%
	TSUNEMI-2016-Japan	-	-	-	-	3%	-	-	-	-	-
Itching	Moftah-2012-Egypt	-	-	-	-	4%	-	-	-	-	0%
Nasopharyngitis	Harcha-2013-Singapore	10%	-	8%	-	13%	-	8%	-	-	9%
	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
	TSUNEMI-2016-Japan	-	-	-	-	15%	-	-	-	-	-
Abdominal pain	Harcha-2013-Singapore	3%	-	4%	-	1%	-	1%	-	-	1%
URTI	Harcha-2013-Singapore	3%	-	1%	-	3%	-	1%	-	-	5%

	TSUNEMI-2016-Japan		-		-	3%	-	-	-	-	
Back pain	Harcha-2013-Singapore	3%	-	2%	-	2%	-	2%	-	-	2%
Diarrhea	Harcha-2013-Singapore	1%	-	4%	-	1%	-	0%	-	-	2%
	Choi-2016-Korea		-	-	-	0.3%	-	-	-	-	
Allergic rhinitis	Harcha-2013-Singapore	1%	-	1%	-	2%	-	3%	-	-	1%
Influenza	Harcha-2013-Singapore	3%	-	2%	-	2%	-	1%	-	-	1%
	TSUNEMI-2016-Japan	-	-	-	-	4%	-	-	-	-	-
Gingivitis	TSUNEMI-2016-Japan	-	-	-	-	3%	-	-	-	-	-
Prostatic-specific antigen increased	TSUNEMI-2016-Japan	-	-	-	-	3%	-	-	-	-	-
Rash	Choi-2016-Korea	-	-	-	-	0.6%	-	-	-	-	-
Pruritus	Choi-2016-Korea	-	-	-	-	0.4%	-	-	-	-	-
Acne	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Alopecia	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Folliculitis	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Dermatophytosis	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Seborrhea	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Verruca	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Dyspepsia	Choi-2016-Korea	-	-	-	-	1.1%	-	-	-	-	-

Psychiatric disorders	Choi-2016-Korea	-	-	-	-	1.8%	-	-	-	-	-
Depression	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Insomnia	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Somnolence	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
SGPT increased	Choi-2016-Korea	-	-	-	-	0.6%	-	-	-	-	-
SGOT increased	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Bilirubin aemia	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Fatigue	Choi-2016-Korea	-	-	-	-	0.7%	-	-	-	-	-
Epistaxis	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Hypertriglyceridaemia	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Weight increase	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Paraesthesia	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Dizziness	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Gynaecomastia	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-
Testosterone decreased	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Palpitation	Choi-2016-Korea	-	-	-	-	0.3%	-	-	-	-	-

Taste perversio n	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-
Surgical interventi on	Choi-2016-Korea	-	-	-	-	0.1%	-	-	-	-	-

AE, adverse events, #decrease or loss, URTI, upper respiratory tract infection