

TABLE E-1 Tanner Staging Classification of Secondary Sexual Characteristics

Tanner Stage		Male	Female
Stage 1 (prepubertal)	Growth	5-6 cm/yr	5-6 cm/yr
	Development	Testes <4 ml or <2.5 cm	No breast development
		No pubic hair	No pubic hair
Stage 2	Growth	5-6 cm/yr	7-8 cm/yr
	Development	Testes 4 ml or 2.5-3.2 cm	Breast buds
		Minimal pubic hair at base of penis	Minimal pubic hair on labia
Stage 3	Growth	7-8 cm/yr	8 cm/yr
	Development	Testes 12 ml or 3.6 cm	Elevation of breasts; areolae enlarged
		Pubic hair over pubis	Pubic hair of mons pubis
		Voice changes	Axillary hair
		Muscle mass increases	Acne
Stage 4	Growth	10 cm/yr	7 cm/yr
	Development	Testes 4.1-4.5 cm	Areolae enlarged
		Pubic hair as adult	Pubic hair as adult
		Axillary hair	
		Acne	
Stage 5	Growth	No growth	No growth
	Development	Testes as adult	Adult breast contour
		Pubic hair as adult	Pubic hair as adult
		Facial hair as adult	
		Mature physique	
Other		Peak Height Velocity: 13.5 years	Adrenarche: 6-8 years
			Menarche: 12.7 years
			Peak Height Velocity: 11.5 years