

**Table 1. Summary of neurogenesis changes in transgenic mouse models of AD**

Genetic Manipulation	Strain Name	Genotype	Promoter	Age (mon)	Pathology (A $\beta$ deposition)	Neurogenesis assessment	Effect	Reference
<b>Knock-in</b>		mo PS1M146V/-		3		BrdU injection twice daily (2 hr apart) for 4 consecutive days	Decreased proliferation and differentiation	36
		hu ApoE4		3, 6-7, 12-13		BrdU injection twice (6 hr apart)	Diminished neuronal maturation	41
		mo APP <sup>swe</sup> /PS1 $\Delta$ E9		8-9, 18-24	post	DCX, MCM2 immunostaining	Decreased proliferation	42
<b>Transgenic</b>		hu PS1P117L	NSE	3-4		one BrdU injection per day for 12 consecutive days	Decreased survival	37
		hu PS1 $\Delta$ E9, hu PS1M146L	PrP	3		single injection of BrdU	Decreased proliferation and differentiation	38
	Tg2576	chimeric mo-hu APP <sup>swe</sup>	PrP	12-14	pre	five daily injections of BrdU	Decreased proliferation, survival and differentiation	39
	PDAPP	hu APP <sup>ind</sup>	PDGF	2, 12	pre, post	one i.p. injection of BrdU	Decreased proliferation and survival	40
	APP/PS1	chimeric mo-hu APP <sup>swe</sup> /hu PS1 $\Delta$ E9	PrP	6	pre, post	BrdU injection once daily for 12 consecutive days	Decreased survival	43
	APP/PS1	chimeric mo-hu APP <sup>swe</sup> /hu PS1 $\Delta$ E9	PrP	2	pre	BrdU injection every 12 hr for 3 days	Decreased proliferation and differentiation	44
	3xTg-AD	hu APP <sup>swe</sup> /PS1M146V/tauP301L	Thy-1.2	4, 9			Decreased proliferation	45
	J20	hu APP <sup>swe</sup> ,ind	PDGF	3, 12	pre, post	BrdU injection twice daily (8 hr apart) for 3 consecutive days	Increased proliferation and differentiation	46
J20	hu APP <sup>swe</sup> ,ind	PDGF	3, 5, 9, 11	pre, post	daily injection of BrdU for 5 days	Increased proliferation and differentiation	47	
J20	hu APP <sup>swe</sup> ,ind	PDGF	2-3	pre	BrdU injection for 3 days	Accelerated early development but impaired late maturation of newborn neurons	48	
<b>Knock-out</b>		ApoE		3, 6-7, 12-13		BrdU injection twice (6 hr apart)	Reduced neurogenesis but increased astrogenesis	41
		PS1/PS2 forebrain KO		7-9, 18-20		single dose injection of BrdU	Enhanced cell proliferation at early stages of neurodegeneration but impaired survival at late stages	49