

Table 261.3. Antiviral activity of protease, polymerase, and assembly inhibitors that have been approved for the treatment of HCV infection.

Compound	HCV genotype	No of isolates	Median HCV replicon, EC ₅₀ (nM)	Range in EC ₅₀	References
NS3/4A protease inhibitors					
<i>First generation</i>					
Telaprevir (VX-950)	1a	1	280	—	M. Jiang <i>et al.</i> (2013); Vertex Pharmaceuticals, (2013)
	1b	1	354	—	
Boceprevir (SCH-503034)	1b	1	200	—	Merck (2015); Paeshuyse <i>et al.</i> (2008)
Simeprevir (TMC-435)	1b	1	9.4	—	Janssen Therapeutics (2015)
Paritaprevir (ABT-450)	1a	11	0.68	0.43–1.87	AbbVie (2015); Pilot-Matias <i>et al.</i> (2015)
	1b	9	0.06	0.03–0.09	
	2a	1	5.3	—	
	3a	1	19	—	
	4a	1	0.09	—	
	6a	1	0.68	—	
Asunaprevir (BMS-650032)	1a	—	4	—	Bristol-Myers Squibb (2015b); McPhee <i>et al.</i> (2012)
	1b	—	1.2	—	
	2a	—	230	—	
	2b	—	480	—	
	3a	—	1162	—	
Vaniprevir (MK-7009)	4a	—	1.8 ^a	—	Lawitz <i>et al.</i> (2013); Liverton <i>et al.</i> (2010); McCauley <i>et al.</i> (2010)
	1b	1	3	—	
	2a	1	9	—	
	2a	1	9	—	
<i>Second generation</i>					
Grazoprevir (MK-5172)	1a	1	2 ^a	—	Shah <i>et al.</i> (2014); Summa <i>et al.</i> (2012)
	1b	1	0.5 ^a	—	
	2a	1	8 ^a	—	
	3	1	13 ^a	—	
NS5B RNA-dependent RNA polymerase inhibitors					
<i>Nucleotide analog</i>					
Sofosbuvir (GS-7977, PSI-7977)	1–6	—	—	14–110	Gilead Sciences (2015a); Lam <i>et al.</i> (2012)
	1a	67	62	29–128	
	1b	29	102	45–170	
	2	15	29	14–81	
	3	106	81	24–181	
<i>Nonnucleoside inhibitor</i>					
Dasabuvir (ABT-333)	1a	11	0.6	0.4–2.1	AbbVie (2015)
	1b	10	0.3	0.2–2	
NS5A inhibitors					
<i>First generation, first wave</i>					
Daclatasvir (BMS-790052)	1a	40	0.008	0.002–2409	Bristol-Myers Squibb (2015a)
	1b	42	0.002	0.0007–10	
	2	16	16	0.005–60	
	3a	17	0.2	0.006–3.2	
	4	14	0.025	0.001–158	
	5	3	0.004	0.003–0.019	
6	1	0.054	—	—	