

Efficacy comparison table of major canine Leptospira vaccines registered in Europe

Vaccine name	Minimum age at vaccination	Strains composition	Strains ID	Clinical registered claims (SPC)										Date 1st registration (or licence review)	Registration: Centralised Decentralised Procedure Mutual Recognition Procedure National		
				Reduction					Prevention				Immunity				
				Clinical signs	Infection	Urinary excretion	Kidney lesions	Kidney colonisation	Mortality	Clinical signs	Infection	Urinary excretion	Mortality			Onset	Duration
Canigen L4*	Unpublished June 2015	1. PO serogroup Canicola 2. CO serogroup Icterohaemorrhagiae 3. DA serogroup Grippotyphosa 4. BR serogroup Australis	1. Ca-12-000 2. Ic-02-001 3. As-05-073 4. Gr-01-005		Y	Y									Unpublished June 2015	Pending EC May 2015	C
Versican L4 mono & various combos Biocan Novel L4 combos	6 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae 3. GR serogroup Grippotyphosa 4. BR serogroup Australis	1. MSLB 1090 2. MSLB 1089 3. MSLB 1091 4. MSLB 1088		Y					Y		Y		4 w	12 m	2014	C, DCP
Nobivac L4*	6 weeks	1. PO serogroup Canicola 2. CO serogroup Icterohaemorrhagiae 3. DA serogroup Grippotyphosa 4. BR serogroup Australis	1. Ca-12-000 2. Ic-02-001 3. As-05-073 4. Gr-01-005		Y	Y								3 w	12 m	2012	C
Versican L3 various combos	8 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae 3. GR serogroup Grippotyphosa	1. MSLB 1010 2. MSLB 1008 3. MSLB 1009	Y	Y	N								4 w	12 m	2012	MRP
Canixin (Canigen) mono & various combos	8 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	1. 601903 2. 601895	Y	Y	Y	Y	Y				Y	5 w 2 w	12 m	2012	MRP, N	
Eurican CHPPI2-LR	12 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	1. 16070 2. 16069	Y		Y			Y				2 w	12 m	2005	MRP	
Virbagen L	8 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	Unpublished	Y									3 w	12 m	2005	N	
Vanguard Lepto Ci	7 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	1. C51 2. NADL 11403	Y									2 w	12 m	2005	MRP	
Eurican L	7-8 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	1. 16070/LC87K1 2. 16069/LI84	Y								Y	2 w	12 m	2004	N	
Duramune (Galaxy) various combos	6 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	Unpublished	Y								Y	2 w	12 m	2003	MRP	
Nobivac or Canigen Lepto 2	8 weeks	1. PO serogroup Canicola 2. CO serogroup Icterohaemorrhagiae	1. Ca-12-000 2. 820K		Y								4 w	12 m 6 m	2002	MRP	
Maxivac various combos	8 weeks	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	Unpublished							Y				12 m	2001	N	
Vanguard (Enduracell) various combos	7-8 weeks (8-12 weeks)	1. CA serogroup Canicola 2. IC serogroup Icterohaemorrhagiae	1. C51 2. NADL 11403	Y	Y								2 w	12 m	1997	N	

* Nobivac L4 and Canigen L4 have an identical qualitative and quantitative strains composition, claims and Market Authorisation Holder
Y: claim agreed on SPC – N: claim specifically denied on SPC

Comparison table composed in June 2015

BR = L.interrogans serovar Bratislava; **CA** = L.interrogans serovar Canicola; **CO** = L.interrogans serovar Copenhageni; **DA** = L.kirschneri serovar Dadas; **IC** = L.interrogans serovar Icterohaemorrhagiae; **GR** = L.kirschneri serovar Grippotyphosa; **PO** = L.interrogans serovar Portland-vere.