



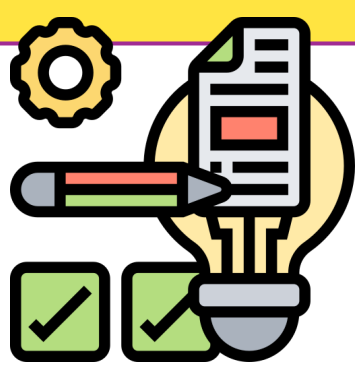
INTRODUCTION

Porcine circovirus type 3 (PCV-3) was first described in 2016 in the United States on a farm having reproductive problems. Since then, PCV3 has been detected worldwide, either accidentally, associated with disease outbreaks, or retrospectively through metagenomic analysis. The most common clinical signs and lesions associated with PCV3 infection are reproductive problems, myocarditis, and other types of multisystemic inflammation. The dermatitis and nephropathy syndrome (PDNS) has been also associated with PCV3. Besides, PCV-3 has also been frequently reported in apparently healthy animals. Retrospective studies showed that PCV3 probably circulates in pigs and has spread globally since the 1990s. PCV3 has also been described in species other than pigs, such as sheep and red deer, among others. The aim of this study is to conduct a literature review on PCV-3 and the associated clinical signs.



OBJECTIVES

- The aims of this study are:
1. Examine the evidence so far on PCV-3 as a primary pathogen.
 2. Make a compendium of the associated diseases and the symptoms they produce.



MATERIAL AND METHODS

Bibliographic review prepared with the collection of information from *Pubmed* where the keywords used have been Porcine circovirus 3 (PCV-3), swine, disease, pathogenicity and prevalence.

The systematic analysis was started with the search using the words. The evidence on which the research has been based is in case reports, outbreak studies, experimental evidence and review articles.

379 Articles

title exclusion

77 Articles

Abstract exclusion

27 Articles

Article exclusion

13 Articles



RESULTS

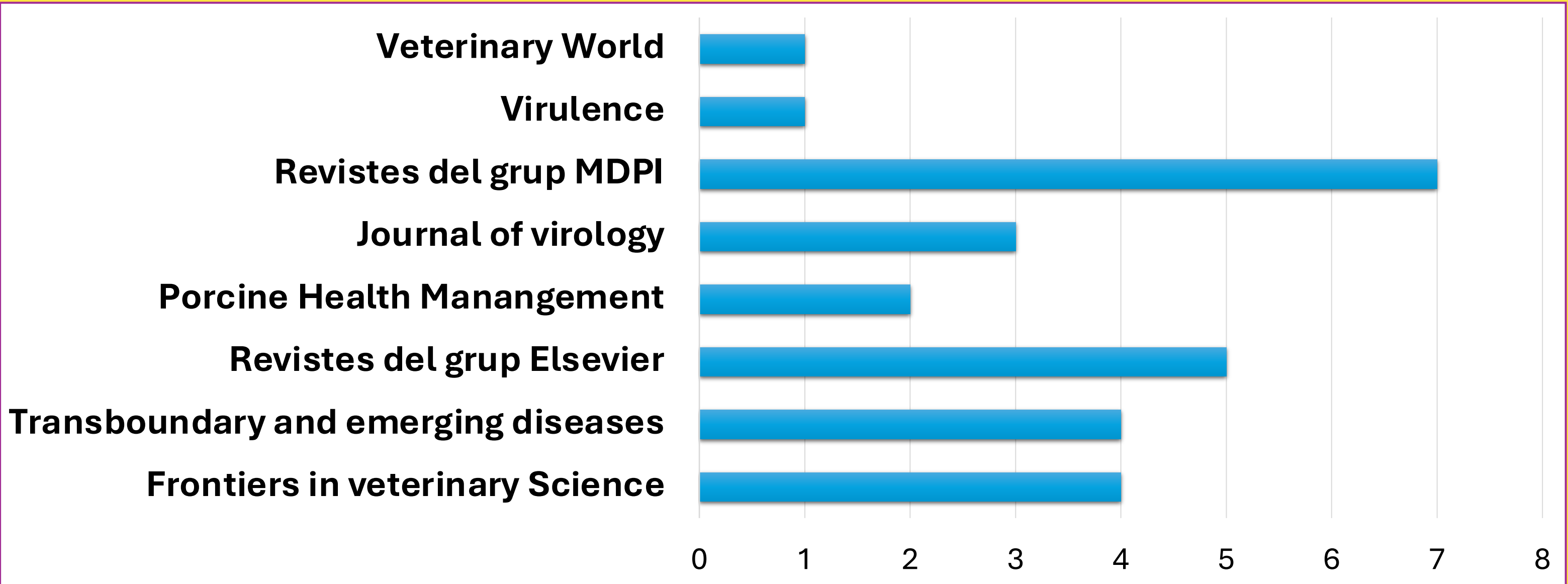
Table 1. Reviews on PCV3 included in the present study in detail of the number of articles that collect and mention each type of disease that has been linked to infection by this pathogen

Article	Respiratory disease	Gastrointestinal symptoms	Reproductive disease	Neurological disease	Cardiac disease	PDNS	Other clinical conditions
Tanja et al., 2020	1	-	7	2	-	3	3
Tan et al. 2021	5	1	3	1	1	2	-
Saporiti et al., 2021	10	3	12	4	2	4	1
Chen et al., 2021	4	-	11	1	6	-	-
Pranoto et al., 2023	2	3	2	-	3	4	-
Silva et al., 2024	3	3	4	3	3	1	-

Table 2. Publications that report cases or outbreaks of disease apparently associated with PCV3 in detail of the type of disease they describe.

Article	Respiratory disease	Gastrointestinal symptoms	Reproductive disease	Neurological disease	Cardiac disease	PDNS	Other clinical conditions
Ouyang et al., 2019	+					+	+
Jiang et al., 2019					+	+	
De Conti et al., 2021	++				+++		+
Alomar et al., 2021	+	+		+	+	+	
Molossi et al., 2023	+				+		++
Cobos et al., 2024			+		+		
Gao et al., 2024			+		+		

Figure. Places where the articles used have been published.



CONCLUSIONS

1. PCV-3 circulation on a global scale.
2. Predominance of respiratory, reproductive and cardiac forms.
3. More investment is required for research.