

Current State and Future Perspectives of Point-of-Care Testing (POCT) in Veterinary Diagnostics in Korea

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The use of in vitro diagnostic veterinary medical reagents (IVDVMRs) has gradually increased both in Korea and other countries according to the demand for diagnostics that is essential in determining prognosis, identifying disease stages, monitoring treatment, and assessing the spreading as health services in veterinary diagnostics. In particular, the device of point-of-care testing (POCT) that can deliver a result within a short turnaround time of approximately 15 min has recently expanded in veterinary diagnostics. In this study, we investigated and analyzed the registration and sales of current state and future perspectives of the IVDVMRs including POCT in veterinary diagnostics in Korea. POCT has evolved from the demand for more rapid analytical information than what is available from central laboratories. It also offers considerable advantages over central laboratory testing, such as simpler specimen handling and sample requirements. POCT has been commonly used for urinalysis, blood glucose testing and monitoring, blood gas and electrolyte testing, coagulation, blood chemistries including enzymes and lipids, drugs of abuse, pregnancy testing, infectious disease testing, cardiac markers, hemoglobin, and hematocrit in veterinary diagnostics. In advanced healthcare systems, POCT may be beneficial if health or cost-benefits can be established. These products have potential utility in many veterinary fields including private clinics, academic veterinary medical centers, the community, and for research applications in academia, government, and industry and in most countries. The prevention and early diagnosis of animal diseases is currently an important and interesting matter in the diagnostics market due to the burden of medical costs for animal companies' entry to the health care industry in Korea. The registration of IVDVMRs including POCT has gradually increased since 2011, and total of 213 products from 27 companies (178 categories from 14 manufacture companies and 36 categories from 13 import companies) were registered as of 2015 in Korea. Most of these items are kits for infectious diseases, pregnancy, blood gas and electrolyte testing, coagulation, blood chemistries, blood typing, and allergic test. In particular, the kit for POCT was mainly used for animal companies. The market size of IVDVMRs reported from Korea Animal Health Product Association (KAHPA) in 2015 was estimated to be approximately 24 billion Won per year. The domestic sales and the export sales were approximately 10 and 14 billion won in 2015, respectively. The proportion of export and domestic consumption of domestic products was 68.2% to 31.8%. Therefore, these findings indicate that the registration and sales of the IVDVMRs including POCT have gradually increased, and have been further growing bigger due to the increasing demand for healthcare services in Korea.

Key words: Veterinary Diagnostics, Veterinary medical devices, Point-of-care testing (POCT)

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