

Outcomes of Treatment for Advanced Gastric Cancer in Korean Patients Treated with Ramucirumab + paclitaxel: A Nationwide Real-World Data

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OBJECTIVES

According to the 2022 Statistics Korea report, cancer is the leading cause of death in Korea. Lung cancer has the highest mortality rate (22.3% of all cancer deaths), followed by liver (12.2%), colorectal (11.0%), pancreatic (8.8%), and gastric cancer (8.6%). Ramucirumab + paclitaxel is a common second-line therapy for advanced gastric cancer, but real-world evidence in Korean patients is limited. The purpose of this study is to identify the median overall survival of patients with advanced gastric cancer treated with ramucirumab + paclitaxel using claims data from the Health Insurance Review and Assessment Service.

METHODS

The study included all gastric cancer patients who received ramucirumab plus paclitaxel between May 1, 2018, and December 31, 2018. We analyzed overall survival periods for those covered by health insurance from May 1, 2018, to September 30, 2019. Kaplan–Meier and Cox proportional hazards models were used for survival analysis, comparing survival based on gender, type of health insurance, and surgery history.

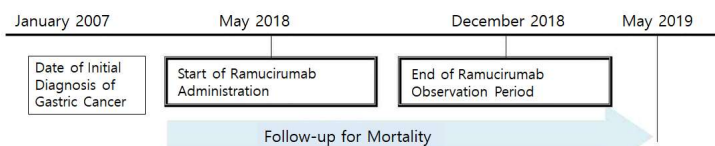


Figure 1. Definition of Patients with Gastric Cancer

RESULTS

A total of 1,419 patients were included, with 1,023 deaths. The median overall survival was 240 days (95% CI 229–259). Median survival showed no significant differences based on gender (males: 245 days, 95% CI 229–267; females: 236 days, 95% CI 213–264) or type of health insurance (general: 240 days, 95% CI 228–259; medical aid: 242 days, 95% CI 191–353). However, survival varied by surgery history (no surgery: 199 days, 95% CI 183–219; with surgery: 278 days, 95% CI 266–293).

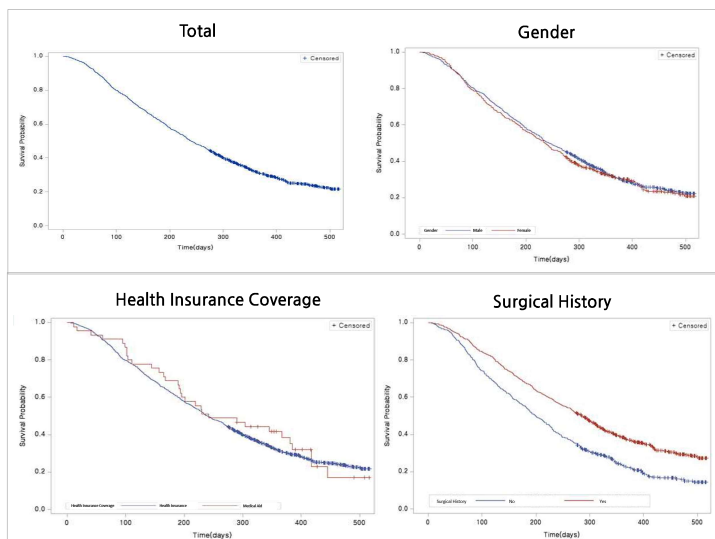


Figure 2. Overall Survival by Characteristics of Patients Treated with Ramucirumab

Table 1. Overall Survival by Characteristics of Patients Treated with Ramucirumab

	Patients	Death (%)	Median		p-value
			Median	95% CI	
Total	1,419	1,023 (72.1)	240	(229, 259)	-
Gender					
Male	964	693 (71.9)	245	(229, 267)	0.4952
Female	455	330 (72.5)	236	(213, 264)	
Age at Cancer Diagnosis					
Under 20	1	1 (100.0)	113	-	0.0309
20-29	11	10 (90.9)	216	(83, 415)	
30-39	88	60 (68.2)	277	(230, 320)	
40-49	243	182 (74.9)	244	(203, 277)	
50-59	453	322 (71.1)	241	(215, 275)	
60-69	431	299 (69.4)	259	(235, 279)	
70 and above	192	149 (77.6)	190.5	(165, 215)	
Health Insurance Coverage					
Health Insurance (General)	1,374	991 (72.1)	240	(228, 259)	0.6301
Medical Aid	45	32 (71.1)	242	(191, 353)	
Charlson Comorbidity Index					
0	502	329 (65.5)	276	(243, 292)	<0.0001*
1	199	141 (70.9)	257	(232, 294)	
2	371	286 (77.1)	227	(197, 266)	
3	347	267 (77.0)	196	(176, 230)	
Type of Medical Institution					
Tertiary	1,097	775 (70.6)	251	(236, 268)	0.0019*
General	322	248 (77.0)	202	(180, 231)	
Medical Department					
Internal Medicine	1,366	987 (72.3)	239	(228, 259)	0.6456
Surgery Department	53	36 (67.9)	294	(203, 316)	
Surgical History					
Yes	610	487 (79.8)	199.5	(183, 219)	<0.0001*
No	809	536 (66.3)	278	(266, 293)	
Frequency of Surgeries					
0	610	487 (79.8)	199.5	(183, 219)	<0.0001*
1	690	450 (65.2)	277.5	(263, 293)	
≥2	119	86 (72.3)	281	(218, 305)	

CONCLUSIONS

Korea's health insurance claims data provide nationwide real-world data under a single-payer system, enabling the tracking of mortality for anticancer drugs despite hospital changes. Limited detailed clinical data prevented progression-free survival analysis. Linking hospital records with claims data is essential for accurate assessment.

REFERENCES

Kim DS, Byun JH, Kim JH, Kim SY, Lee EJ, Kim SH, et al. A retrospective case study through real-world evidence (RWE) for health technology assessment (HTA) in pharmaceuticals. Wonju: Health Insurance Review & Assessment Service; 2020. Available from: <https://repository.hira.or.kr/handle/2019.oak/3035>.