



Prescription patterns and trends of hepatoprotective medicines in Japan: a health insurance claims database analysis

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Introduction

- Hepatoprotective medicines are widely used for the treatment of chronic hepatitis and liver injury in Asia countries such as China and Japan.
- To assess the hepatoprotective medicines (HPMs) use in Japan, the study evaluated the real-world situation of prescription patterns and the trends of the market share of HPMs in Japan.

Methods

- Data of HPMs prescriptions between January 2005 and April 2019 were obtained from the health insurance claims database by JMDC Inc.
- Characteristics of patients and hospitals and the market share of each chemical category and product of HPMs were collected.
- The prescription patterns of HPMs were analyzed.
- The study was approved by the Kyoto University Ethics Committee (No. R2477 and R2477-1).

Results

- Of the 330,346 patients included in the study, 1.9% of HPMs users had the diagnosis of liver injury at the time of HPMs initiation.
- Clinics prescribed 86% of the total HPMs prescriptions and 60% of the prescriptions were from the department of internal medicine .
- The most common comorbidities were hypertension, chronic hepatitis, hyperlipidemia, allergic rhinitis, and diabetes.
- Approximately 80% of the HPMs market was taken by ursodeoxycholic acid and glycyrrhizin products, with the market share of ursodeoxycholic acid products increasing and glycyrrhizin products decreasing meanwhile.
- One ursodeoxycholic acid product dominated half of the market at the peak year but was replaced by the other 2 ursodeoxycholic acid products from other manufactures.

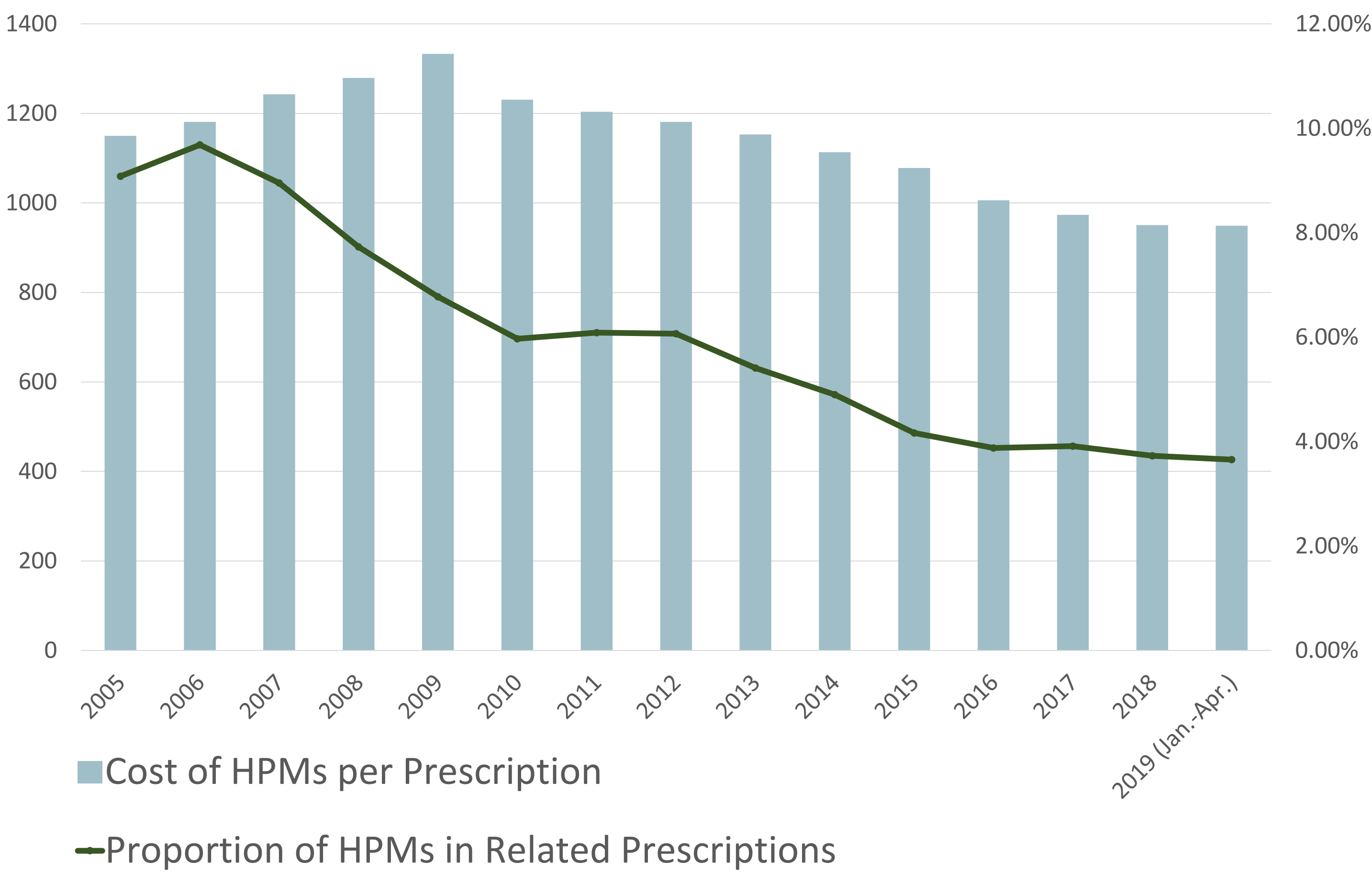


Figure 1. Average cost of HPMs (Yen)

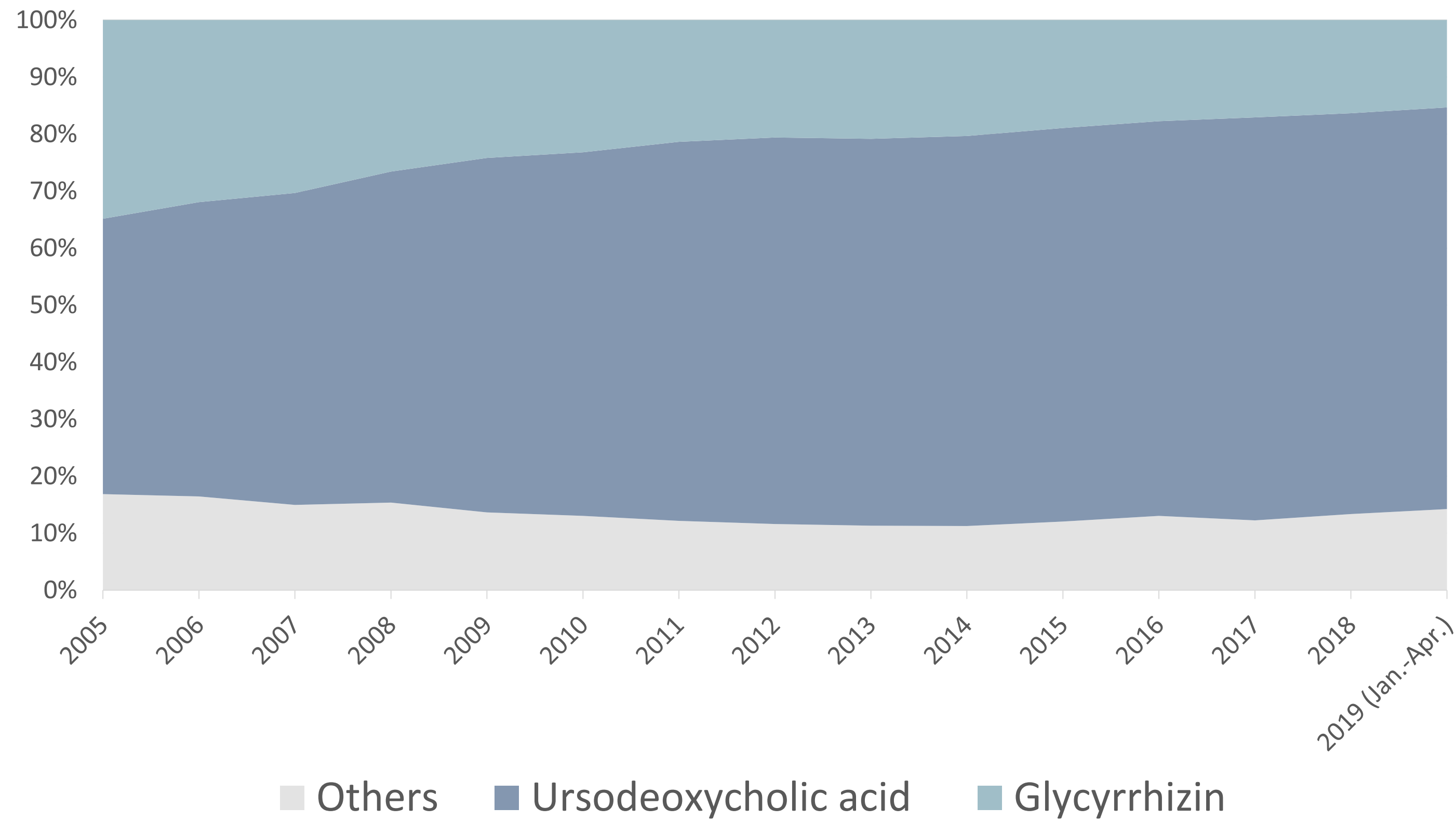


Figure 2. Proportion of cost of chemical categories

	n	Percent
Hypertension	209661	3.4
Chronic hepatitis	162542	2.63
Hyperlipidemia	142483	2.31
Allergic rhinitis	131775	2.13
Diabetes	130453	2.11
Urticaria	115531	1.87
Chronic gastritis	110225	1.79
Liver injury	107402	1.74
Low back pain	98070	1.59
Hyperuricemia	92902	1.5
Insomnia	89784	1.45
Hypercholesterolemia	87580	1.42
Eczema	84852	1.37
Atopic dermatitis	81142	1.31
Constipation	79816	1.29
Gastric ulcer	76215	1.23
Reflux esophagitis	74333	1.2
Cholelithiasis	72567	1.18
Fatty liver	67979	1.1

Table. Diagnoses of diagnosis with HPM (>1%)

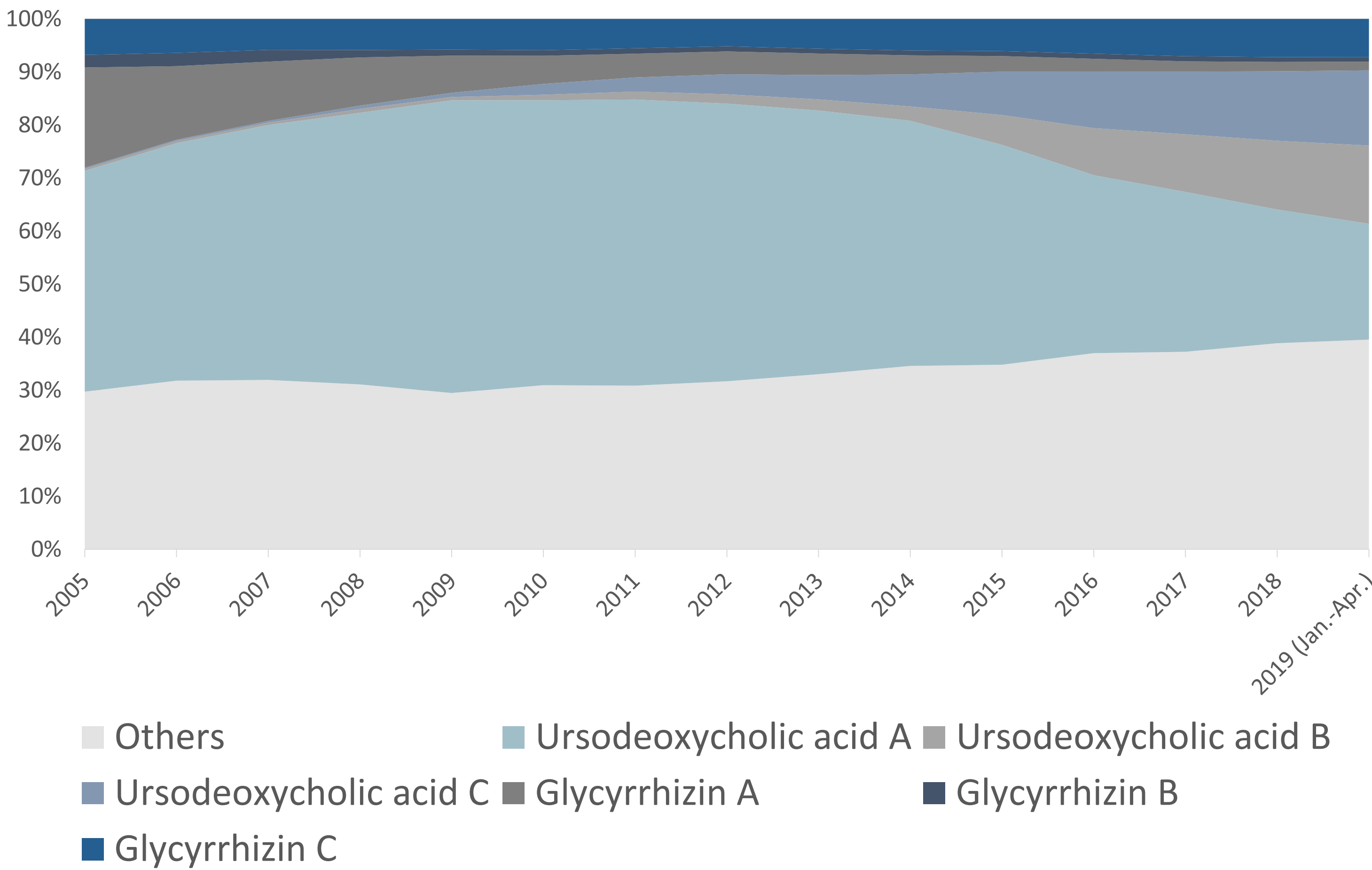


Figure 3. Proportion of main HPM products

Conclusion

- HPMs were prescribed mostly for outpatients and their prevention of liver injure.
- The average cost and usage of HPMs had been decreasing between 2005 and 2019.
- The dominant HPMs products were ursodeoxycholic acid and glycyrrhizin, with the latter one replaced by ursodeoxycholic acid products.