26G-ISMS42 Anti-Helicobacter Pylori Activity of a Novel Derivative of Intervenolin O Tomokazu OHISHI¹, Toru MASUDA¹, Shun-ichi OHBA¹, Chigusa HAYASHI², Hikaru ABE³, Masayuki IGARASHI², Takumi WATANABE³, Daniel Ken INAOKA⁴, Kiyoshi KITA⁵, Masakatsu SHIBASAKI³, Manabu KAWADA^{1,6} ¹Institute of Microbial Chemistry (BIKAKEN), Numazu, Microbial Chemistry Research Foundation, ²Institute of Microbial Chemistry (BIKAKEN), Laboratory of Microbiology, Microbial Chemistry Research Foundation, ³Institute of Microbial Chemistry (BIKAKEN), Laboratory of Synthetic Organic Chemistry, Microbial Chemistry Research Foundation, ⁴Center for International Collaborative Research, Nagasaki University, ⁵School of Tropical Medicine and Global Health, Nagasaki University, ⁶Institute of Microbial Chemistry (BIKAKEN), Laboratory of Oncology, Microbial Chemistry Research Foundation

Colonization and infection of Helicobacter pylori (H. pylori) is a major cause of gastric diseases including gastritis, peptic ulcers, and gastric cancer. Therefore, eradication of *H. pylori* leads to prevention of gastric diseases. Although standard treatment for *H. pylori* involves a combination of antibiotics, they kill most bacteria in our body, leading to the occurrence of side effects. We previously found that an antitumor agent intervenolin (ITV) also exhibits selective anti-H. pylori activity. Here we demonstrate that a novel derivative of ITV showed selective anti-H. pylori activity like ITV without any effect on other bacteria including intestinal bacteria. Interestingly, oral monotherapy of the ITV derivative had a stronger anti-H. pylori activity without any side effects in a mouse H. pylori-infection model than that of ITV and the standard triple therapy of a proton pump inhibitor and two antibiotics. These results suggest that the ITVderivative would be a new potential therapeutic agent for *H. pylori* infection treatment. Now, we are trying to identify a molecular target of the ITV-derivative against H. pylori.