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## Poster P09.6

**Natural Compounds Potentially Suppressible Corona Virus Infection Disease**S. Kwon <sup>1,2</sup>, J. Lee <sup>3</sup>, G.W. Kim <sup>1,2</sup>, D.E. Kim <sup>1,2</sup>, Y.H. Jin <sup>1,2</sup>, S. Kim <sup>3</sup>, H.R. Kim <sup>2</sup><sup>1</sup> Korea Institute of Oriental Medicine (KIOM), Daejeon, South Korea<sup>2</sup> Korea Research Institute of Chemical Technology (KRICT), Daejeon, South Korea<sup>3</sup> Institute Pasteur Korea, Gyeonggi-do, South Korea

## Abstract

As we recognized from 2015's pandemic of Middle East Respiratory Syndrome Corona Virus (MERS-CoV) infection in South Korea, emerging viral infections are threatening the national healthcare system and have a negative impact on social security. As we have developed novel anti-viral compounds to treat emerging viral infection, most of all, we have sought natural compounds potentially suppressible MERS-CoV infection from natural plants used in traditional medicine by using image-based high throughput screening (HTS) system. We found some natural flavonoids and steroids significantly inhibits MERS-CoV infection ( $IC_{50} < 10$  micro mole) as maintaining high cellular viability. Our results indicate that these natural compounds may be useful for alternative clinical application of treating MERS-CoV infection disease.

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