

**Abstracts** 

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## **Oral Abstracts**

**COVID-19 Pivots** 

OA01.01

## Add-on Chinese Medicine for Coronavirus Disease 2019 (ACCORD): A Retrospective Cohort Study of Hospital Registries

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## **Abstract**

**Objective:** Previous studies showed that the effect of antivirals for COVID-19 was promising but varied across patient population, and was modest among severe cases. Chinese Medicine (CM) was extensively used to treat

COVID-19 in China. We aimed to evaluate the real-world effectiveness of add-on semi-individualized CM during the outbreak.

**Methods:** A retrospective total sampling cohort of 1788 adult confirmed COVID-19 patients were recruited from all 2235 consecutive records retrieved from 5 hospitals in Wuhan during 15 January to 13 March 2020. Consultation notes, laboratory/imaging investigations, pharmacy and prognosis records were linked by an electronic medical record system and verified by at least 2 researchers independently. The mortality of add-on semi-individualized CM users and non-users was compared by inverse probability weighted hazard ratio (HR) and by propensity score matching. Change of biomarkers was compared between groups and the frequency of CMs used was analysed. Subgroup analysis was performed to stratify disease severity and dose of CM exposure. Sensitivity analyses were conducted to test the robustness. Change of key biomarkers and the prescription were analysed.

**Results:** The crude mortality was 3.8% in the semi-individualized CM user group and 17.0% among the non-users. Add-on CM was associated with a mortality reduction of 58% (HR = 0.42, 95% CI: 0.23 to 0.77) among all COVID-19 cases and 66% (HR = 0.34, 95% CI: 0.15 to 0.76) among severe/critical COVID-19 cases demonstrating dose-dependent response, after inversely weighted with propensity score. The result was robust in various stratified, weighted, matched, adjusted and sensitivity analyses. Severe/critical patients received add-on CM had a trend of stabilized D-dimer level after 3–7 days of admission when compared to baseline. Anti-inflammatory, immuno-modulating and anti-asthmatic CMs were most used.

**Conclusion:** Add-on semi-individualized CM was associated with significantly reduced mortality demonstrating dosedependent response, especially among severe/critical COVID-19 patients. Chinese medicine could be considered as an add-on regimen for trial use.