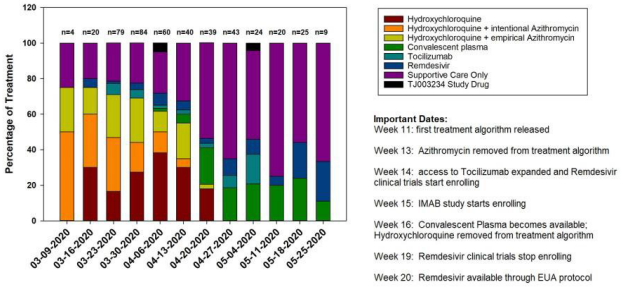
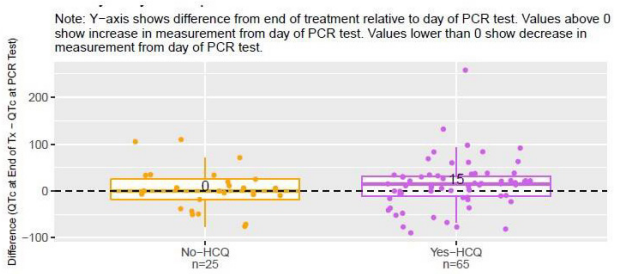
Treatment Trends by Week



QTC pre/post Treatment by Hydroxychloroquine Use vs. No Hydroxychloroquine Use



Disclosures: **Samir Gupta, MD**, **Gilead Sciences** (Consultant, Scientific Research Study Investigator, Advisor or Review Panel member)**ViiV** (Consultant, Grant/Research Support, Scientific Research Study Investigator, Advisor or Review Panel member, Research Grant or Support)

548. Baseline characteristics associated with clinical improvement and mortality in hospitalized patients with moderate COVID-19

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Session: P-21. COVID-19 Treatment

Background: Remdesivir (RDV) has been shown to shorten recovery time and was well tolerated in patients with severe COVID-19. Here we report baseline characteristics associated with clinical improvement at day (d) 14.

Methods: We enrolled hospitalized patients with confirmed SARS-CoV-2 infection, oxygen saturation >94% on room air, and radiological evidence of pneumonia. Patients were randomized 1:1:1 to receive 5d or 10d of intravenous RDV once daily plus standard of care (SoC), or SoC only. For this analysis, patients were followed through discharge, d14, or death. Baseline demographic and disease characteristics associated with clinical improvement in oxygen support (≥2-point improvement on a 7-category ordinal scale ranging from discharge to death) were evaluated using multivariable logistic regression methods.

Results: 584 patients were randomized and treated (5/10d RDV, n=384; SoC: n=200). 159 (27%) were ≥65y, 227 (39%) female, 328 (61%) white, 102 (19%) Asian, and 99 (19%) Black. 252 participants (43%) were enrolled in Europe, 260 (45%) North America (NA), and 72 (12%) in Asia. Most patients (483 [83%]) were not on supplemental oxygen but required medical care at baseline. In a multivariable model, 5/10d RDV was significantly positively associated with clinical improvement (adjusted odds ratio [OR] 1.69, 95% CI: 1.08, 2.65; p=0.0226). Significant covariables positively associated with clinical improvement included age < 65y (p< 0.0001) and region of treatment (Europe and NA vs Asia, p< 0.0001 each; Table); other examined factors were not significantly associated with clinical improvement, including gender, race, ethnicity, baseline oxygen support, duration of symptoms and hospitalization, obesity, and baseline transaminase levels.

Table 1.

Table. Baseline characteristics associated with ≥2-point improvement at day 14 in patients with moderate COVID-19 treated with 5 days or 10 days remdesivir vs standard of care (based on multivariate analyses)

Risk factor: Subgroups	Univariate p-value	Multivariate p-value [a, b]	Multivariate OR (95% CI)[a]
Age: <65 vs ≥65y	0.0002	<0.0001	3.21 (2.03, 5.09)
Gender: Male vs Female	0.1504	NS	-
Ethnicity: Hispanic vs non-Hispanic	0.0154	NS	-
Race Black vs Asian	<0.0001	NS	-
White vs Asian	<0.0001	NS	-
Region: Europe vs Asia	<0.0001	<0.0001	26.56 (12.17- 57.94)
North America vs Asia	<0.0001	<0.0001	66.20 (29.15- 150.32)
Baseline oxygen: Room air vs low-flow/high-flow oxygen	0.6784	NS	-
Duration of hospitalization: ≤2 vs > 2d	0.0643	NS	-
Duration of symptoms: ≤10 vs >10d	0.7428	NS	-
Obesity: Y vs N	<0.0001	NS	-
Baseline ALT: >29 vs <29 U/L	0.6804	NS	-
Baseline AST: >33 vs ≤33U/L	0.6729	NS	-

[a] Adjusted for treatment arm and other variables in the multivariate model,

[b] NS: non-significant (not selected) at p<0.05

Conclusion: In moderate COVID-19 patients, after adjusting for treatment arm, age < 65y and region (NA vs Asia; Europe vs Asia) were associated with higher rates of clinical improvement. These observations recapitulate younger age as positive prognostic factor, and highlight the differences in the impact of the pandemic globally.

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549. Clinical Characteristics and Outcomes of Patients with COVID-19 treated with Convalescent Plasma in Miami, Florida

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Session: P-21. COVID-19 Treatment

Background: The Coronavirus disease of 2019 (COVID-19) global health crisis caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has resulted in unprecedented mortality, impacted society, and strained healthcare systems, yet sufficient data regarding treatment options are lacking. Convalescent plasma, used since 1895 for infectious disease outbreaks, offers promise as a treatment option for COVID-19.

Methods: This is a retrospective study of patients diagnosed by a nasopharyngeal swab SARS-CoV-2 reverse transcriptase–polymerase chain reaction (RT-PCR), who received convalescent plasma between April to June 2020 at two large hospitals in Miami, Florida, as part of the US FDA Expanded Access Program for COVID-19 convalescent plasma (CCP).

Results: A total of 23 patients received CCP, 13 (57%) had severe COVID-19 disease, while 8 (35%) had critical or critical with multiorgan dysfunction. Median time of follow up was 26 (range, 7–79) days. Overall, 11 (48%) survived to discharge, 6 (26%)