A. Evaluation of Medical Evidence Dependency Parser

Table 1 and Table 2 show detailed evaluation for Medical Evidence Dependency Parser.

|                | Precision | Recall | Micro-F1 |
|----------------|-----------|--------|----------|
| Intervention   | 0.70      | 0.74   | 0.72     |
| Outcome        | 0.72      | 0.79   | 0.75     |
| Count          | 0.50      | 0.79   | 0.62     |
| Observation    | 0.71      | 0.81   | 0.76     |
| Overall        | 0.70      | 0.78   | 0.74     |

Table 1: Performance of Named Entity Recognition module for Medical Evidence Elements

|                | Precision | Recall | Micro-F1 |
|----------------|-----------|--------|----------|
| Dependent      | 0.85      | 0.83   | 0.84     |
| Independent    | 0.95      | 0.95   | 0.95     |
| Overall        | 0.92      | 0.92   | 0.92     |

Table 2: Performance of Relation Extraction module for Medical Evidence Dependency on gold standards.

B. COVID-19 Evidence Inference data
Result: There was no significant difference in the occurrence rates of ground glass opacities, consolidation, crazy-paving pattern, fiber cable shadow and axial interstitial thickening between the study group and control group (p > 0.05). In addition, no significant difference was found for the subjective score of overall image quality and image noise level (SD) between the two groups (p > 0.05). However, significant differences were found in CTDIvol, DLP, and ED between the study group and the control group (p < 0.05). The effective dose of the study group was reduced by 76% compared to the control group. Conclusion: CareDose 4D low-dose scanning combined with Karl 3D iterative reconstruction technology can not only greatly reduce the radiation dose, but also provide images that meet the diagnostic criteria of COVID-19, which can be used as a routine method for the follow-up of COVID-19 patients.
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Results: Of 150 patients, 148 had mild to moderate disease and two had severe disease. The mean duration from symptom onset to randomisation was 16.6 (SD 10.5; range 3-41) days. A total of 109 (73%) patients (56 standard of care; 53 standard of care plus hydroxychloroquine) had negative conversion well before 28 days, and the remaining 41 (27%) patients (19 standard of care; 22 standard of care plus hydroxychloroquine) were censored as they did not reach negative conversion of virus. The probability of negative conversion by 28 days in the standard of care plus hydroxychloroquine group was 85.4% (95% confidence interval 73.8% to 93.8%), similar to that in the standard of care group (81.3%, 71.2% to 89.6%).

The difference between groups was 4.1% (95% confidence interval -10.3% to 18.5%). In the safety population, adverse events were recorded in 7/80 (9%) hydroxychloroquine non-recipients and in 21/70 (30%) hydroxychloroquine recipients. The most common adverse event in the hydroxychloroquine recipients was diant was associated with a negative conversion rate of viral PCR at 72 hours in 87.2% of the convalescent plasma group vs 37.5% of the control group (OR, 11.39 [95% CI, 3.91-33.18]; P < .001). Two patients in the convalescent plasma group experienced adverse events within hours after transfusion that improved with supportive care. Conclusion and relevance: Among patients with severe or life-threatening COVID-19, convalescent p

Results: Out of a predefined sample size of 440 patients, 81 were enrolled (41 [50.6%] to high-dosage group and 40 [49.4%] to low-dosage group). Enrolled patients had a mean (SD) age of 51.1 (13.9) years, and most (60 [75.3%]) were men. Older age (mean [SD] age, 54.7 [13.7] years vs 47.4 [13.3] years) and more heart disease (5 of 28 [17.9%] vs 0) were seen in the high-dose group. Viral RNA was detected in 31 of 40 (77.5%) and 31 of 41 (75.6%) patients in the low-dosage and high-dosage groups, respectively. Lethality until day 13 was 39.0% in the high-dosage group (16 of 41) and 15.0% in the low-dosage group (6 of 40). The high-dosage group presented more instance of QTc interval greater than 500 milliseconds (7 of 37 [18.9%]) compared with the low-dosage group (4 of 36 [11.1%]). Respiratory secretion at day 4 was negative in only 6 of 27 patients (22.2%). Conclusions and relevance: The preliminary findings of this study suggest that the higher CQ dosage should not be recommended for critically ill patients wint was associated with a negative conversion rate of viral PCR at 72 hours in 87.2% of the convalescent plasma group vs 37.5% of the control group (OR, 11.39 [95% CI, 3.91-33.18]; P < .001). Two pa
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Results: The average anxiety score (STAI) before intervention was not statistically significant (P = 0.730), and the average anxiety score after intervention was statistically significant (P < 0.001). The average sleep quality score (SRSS) of the two groups before intervention was not statistically significant (P = 0.838), and it was statistically significant after intervention (P < 0.001). Conclusion: Progressive muscle relaxation as an auxiliary method can reduce anxiety and improve sleep quality in patients with COVID-19.
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Findings: Between Feb 6, 2020, and March 12, 2020, 237 patients were enrolled and randomly assigned to a treatment group (158 to remdesivir and 79 to placebo); one patient in the placebo group who withdrew after randomisation was not included in the ITT population. Remdesivir use was not associated with a difference in time to clinical improvement (hazard ratio 1.23 [95% CI 0.87-1.75]). Although not statistically significant, patients receiving remdesivir had a numerically faster time to clinical improvement than those receiving placebo among patients with symptom duration of 10 days or less (hazard ratio 1.52 [0.95-2.43]). Adverse events were reported in 102 (66%) of 155 remdesivir recipients versus 50 (64%) of 78 placebo recipients. Remdesivir was stopped early because of adverse events in 18 (12%) patients versus four (5%) patients who stopped placebo early. Interpretation: In this study of adult patients admitted to hospital for severe COVID-19, remdesivir was not associated with statistically significant was associated with a negative conversion rate of viral PCR at 72 hours in 87.2% of the convalescent plasma group vs 37.5% of the control group (OR
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Results: A total of 199 patients with laboratory-confirmed SARS-CoV-2 infection underwent randomization; 99 were assigned to the lopinavir-ritonavir group, and 100 to the standard-care group. Treatment with lopinavir-ritonavir was not associated with a difference from standard care in the time to clinical improvement (hazard ratio for clinical improvement, 1.31; 95% confidence interval [CI], 0.95 to 1.80). Mortality at 28 days was similar in the lopinavir-ritonavir group and the standard-care group (19.2% vs. 25.0%; difference, -5.8 percentage points; 95% CI, -17.3 to 5.7). The percentages of patients with detectable viral RNA at various time points were similar. In a modified intention-to-treat analysis, lopinavir-ritonavir led to a median time to clinical improvement that was shorter by 1 day than that observed with standard care (hazard ratio, 1.39; 95% CI, 1.00 to 1.91). Gastrointestinal adverse events were more common in the lopinavir-ritonavir group, but serious adverse events were more common in the control group (OR, 11.39 [95% CI, 3.91-33.18]; P < .001). Two patients in the convalescent plasma group experienced adverse events within hours after transfusion that improved with supportive care. Conclusion and relevance: Among patients with severe illness, lopinavir-ritonavir led to a shorter time to clinical improvement compared to standard care. The convalescent plasma group had improved clinical outcomes compared to standard care.
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Results: Of 103 patients who were randomized (median age, 70 years; 60 [58.3%] male), 101 (98.1%) completed the trial. Clinical improvement occurred within 28 days in 51.9% (27/52) of the convalescent plasma group vs 43.1% (22/51) in the control group (difference, 8.8% [95% CI, -10.4% to 28.0%]; hazard ratio [HR], 1.40 [95% CI, 0.79-2.49]; P = .26). Among those with severe disease, the primary outcome occurred in 91.3% (21/23) of the convalescent plasma group vs 68.2% (15/22) of the control group (HR, 2.15 [95% CI, 1.07-4.32]; P = .03); among those with life-threatening disease the primary outcome occurred in 20.7% (6/29) of the convalescent plasma group vs 24.1% (7/29) of the control group (HR, 0.88 [95% CI, 0.30-2.63]; P = .83) (P for interaction = .17). There was no significant difference in 28-day mortality (15.7% vs 24.0%; OR, 0.65 [95% CI, 0.29-1.46]; P = .30) or time from randomization to discharge (51.0% vs 36.0% discharged by day 28; HR, 1.61 [95% CI, 0.88-2.93]; P = .12). Convalescent plasma treatment was associated with a negative conversion rate of viral PCR at 72 hours in 87.2% of the convalescent plasma group vs 37.5% of the control group (OR, 11.39 [95% CI, 3.91-33.18]; P < .001). Two patients in the convalescent plasma group experienced adverse events within hours after transfusion that improved with supportive care. Conclusion and relevance: Among patients with severe or life-threatening COVID-19, convalescent plasma therapy added to standard treatment, compared with standard treatment alone, did not result in a statistically significant improvement in time to clinical improvement within 28 days. Interpretation is limited by early termination of the trial, which may have been underpowered to detect a clinically important difference.
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