

Table 1. Course of Disease parameters evaluated in the 19 patients who maintained abatacept or tocilizumab SC injections in the Rheumatology department of Cochin Hospital

Parameter, mean(SD)	Inclusion visit Switch to SC (n=19)	6 month visit (n=19)	P-value
DAS28	2.3 (1.2)	2.3 (0.7)	0.62
Tender joint count	2.5 (3.5)	1.3 (1.7)	0.49
Swollen joint count	1.3 (2.5)	0.9 (0.6)	0.35
Patient Global Health (cm)	3.2 (1.9)	2.6 (1.8)	0.60
CRP (mg/L)	3.2 (4.1)	5.2 (4.9)	0.56

CRP: C-Reactive Protein, SD: Standard Deviation

The combined analysis of these two populations included 41 patients (33 rheumatoid arthritis, RA, 7 juvenile idiopathic arthritis, JIA and 1 polymyalgia rheumatica) who switched to SC ABT or TCZ. 26/41 (63.5%) patients maintained SC injections and IV was re-established in 15/41 (36.5%). Reasons for returning to IV were poor tolerance of SC injections (n=6, 40%), worsening symptoms (n=11, 73%), patient preference to see a rheumatologist in hospital (n=10, 67%) and the high number of SC injections (n=2, 13%). The proportion of patients returning to IV was higher in RA patients compared to patients with JIA (42% vs. 14%, p = 0.08). Age and disease duration were not significantly different between patients who maintained SC injections and those who returned to IV (respectively p=0.97 and p=0.63).

Conclusion: Our study suggests that switching from IV ABT or TCZ to SC is an acceptable procedure during the COVID-19 pandemic, especially for patients with JIA.

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AB0666

PROGNOSTIC VALUE OF SERUM KREBS VON DEN LUNGEN-6 GLYCOPROTEIN CIRCULATING LEVELS IN COVID-19 PNEUMONIA: A PROSPECTIVE COHORT STUDY

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Background: Currently, there are no biomarkers to predict respiratory worsening in patients with Coronavirus infectious disease, 2019 (COVID-19) pneumonia.

Objectives: We aimed to determine the prognostic value of Krebs von den Lungen-6 circulating serum levels (sKL-6) predicting COVID-19 evolving trends.

Methods: We prospectively analyzed the clinical and laboratory characteristics of 375 COVID-19 patients with mild lung disease on admission. sKL-6 was obtained in all patients at baseline and compared among patients with respiratory worsening.

Results: 45.1% of patients developed respiratory worsening during hospitalization. Baseline sKL-6 levels were higher in patients who had respiratory worsening (median [IQR] 303 [209-449] vs. 285.5 [15.8-5724], P=0.068). The best sKL-6 cut-off point was 408 U/mL (area under the curve 0.55; 33% sensitivity, 79% specificity). Independent predictors of respiratory worsening were sKL-6 serum levels, age >51 years, time hospitalized, and dyspnea on admission. Patients with baseline sKL-6 ≥ 408 U/mL had a 39% higher risk of developing respiratory aggravation seven days after admission. In patients with serial determinations, sKL-6 was also higher in those who subsequently worsened (median [IQR] 330 [219-460] vs 290.5 [193-396]; p<0.02).

Conclusion: sKL-6 has a low sensibility to predict respiratory worsening in patients with mild COVID-19 pneumonia. Baseline sKL-6 ≥ 408 U/mL is associated to a higher risk of respiratory worsening. sKL-6 levels are not useful as a screening tool to stratify patients on admission but further research is needed to investigate if serial determinations of sKL-6 may be of prognostic use.

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AB0667

A PROSPECTIVE STUDY INTO COVID-19 LIKE SYMPTOMS IN PATIENTS WITH AND WITHOUT IMMUNE MEDIATED INFLAMMATORY DISEASES OR IMMUNOMODULATING DRUGS

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Background: Patients with an immune mediated inflammatory disorder or post solid organ transplantation (IMiD), are at risk for infectious complications especially if they are treated with immunosuppressive drugs (imes). There is still great uncertainty whether these IMiD patients are more susceptible to COVID-19 than controls, and/or should be advised to avoid taking their immunosuppressive treatment.

Objectives: To evaluate whether patients with IMiD are more at risk for CLS than controls.

Methods: The IENIMINI study is a prospective cohort study in patients with IMiD and controls (healthy or no IMiD) who were identified based on the registration database of the Leiden University Medical Center. Over time, participants registered COVID-like symptoms (CLS) as they occurred, and filled in additional questionnaires. Univariate and multivariate regression analyses were done to identify variables associated with having CLS.

Results: Of the 8670 individuals approached, 2110 with IMiD and 1067 controls agreed to participate. In March and April, 454 (22%) of IMiD patients and 242 (23%) of controls recorded to have CLS, mostly mild with a median (IQR) duration of seven (3-14) days in the IMiD group and six days (4-11) in the control group. Eleven (5%) of the IMiD patients with immunosuppressive medication (imed), 6 (3%) of IMiDs without imed and 2 (1%) of controls were hospitalized with CLS (p=0.04). In May and June, fewer episodes overall were recorded. Being female (OR 1.45 95%CI 1.15;1.82), having a lung disease (OR 1.50 95%CI 1.20;1.88) and wearing a face mask (OR 1.42 95%CI 1.13-1.77) were independently associated with a higher risk, while higher age (OR 0.96 95%CI 0.96;0.97) and having an IMiD with immunosuppressive medication use (OR 0.68 95%CI 0.51;0.91) were independently associated with a lower risk (see Table 1). Similar results were found after data imputation.

Table 1. Univariate & multivariate analysis of variables associated with having CLS or not (OR with 95% CI)

	n ⁰	Univariate	Multivariate*
Sex, female	2546	1.89 (1.58;2.25)	1.45 (1.15;1.82)
BMI	2391	0.99 (0.97;1.01)	1.00 (0.98;1.03)
Age	2546	0.97 (0.96;0.97)	0.96 (0.96;0.97)
IMiD without imed†	2546	1.00 (0.82;1.23)	0.94 (0.72;1.24)
IMiD with imed †	2546	0.79 (0.65;0.97)	0.68 (0.51;0.91)
Smoking (current)	2463	1.35 (1.02;1.78)	1.05 (0.74;1.50)
Physical contact with family**	2220	1.47 (1.22;1.78)	1.22 (0.98;1.53)
Visiting other people (not family)	2205	1.26 (1.05;1.51)	0.96 (0.77;1.20)
Wearing a face mask	2196	1.46 (1.20;1.76)	1.42 (1.13;1.77)
Close contact (at work)	2180	1.65 (1.34;2.03)	1.27 (0.97;1.66)
Self-reported Diabetes Mellitus	2381	0.69 (0.50;0.96)	0.89 (0.58;1.36)
Self-reported lung disease	2396	1.30 (1.09;1.54)	1.50 (1.20;1.88)
Self-reported heart disease	2399	0.85 (0.69;1.04)	1.09 (0.83;1.43)
Daily alcohol use	2416	0.84 (0.71;1.00)	1.20 (0.96;1.50)
Influenza vaccination***	2415	0.71 (0.60;0.84)	0.96 (0.76;1.21)
Solid organ transplantation	2546	0.74 (0.54;1.03)	0.79 (0.47;1.35)
Good adherence to lockdown rules	2245	1.17 (0.41;3.29)	2.46 (0.65;9.38)
Use of oral corticosteroids	2546	0.84 (0.66;1.06)	1.44 (0.95;2.20)
Working outside the house	2435	1.39 (1.16;1.68)	0.92 (0.71;1.20)

Abbreviations: BMI=body mass index; CI= confidence intervals; CLS=Covid like symptoms; IMiD= with immune mediated inflammatory disorders or transplant organ; n0=number of observations; OR=odds ratio.

* number of observations: 1835

** physical contact specified as 'holding/shaking hands, hugging etcetera'

*** in autumn 2019† control group = reference group