# High SARS-CoV-2 seroprevalence but no severe courses of COVID-19 disease among people in opioid agonist treatment in Zurich

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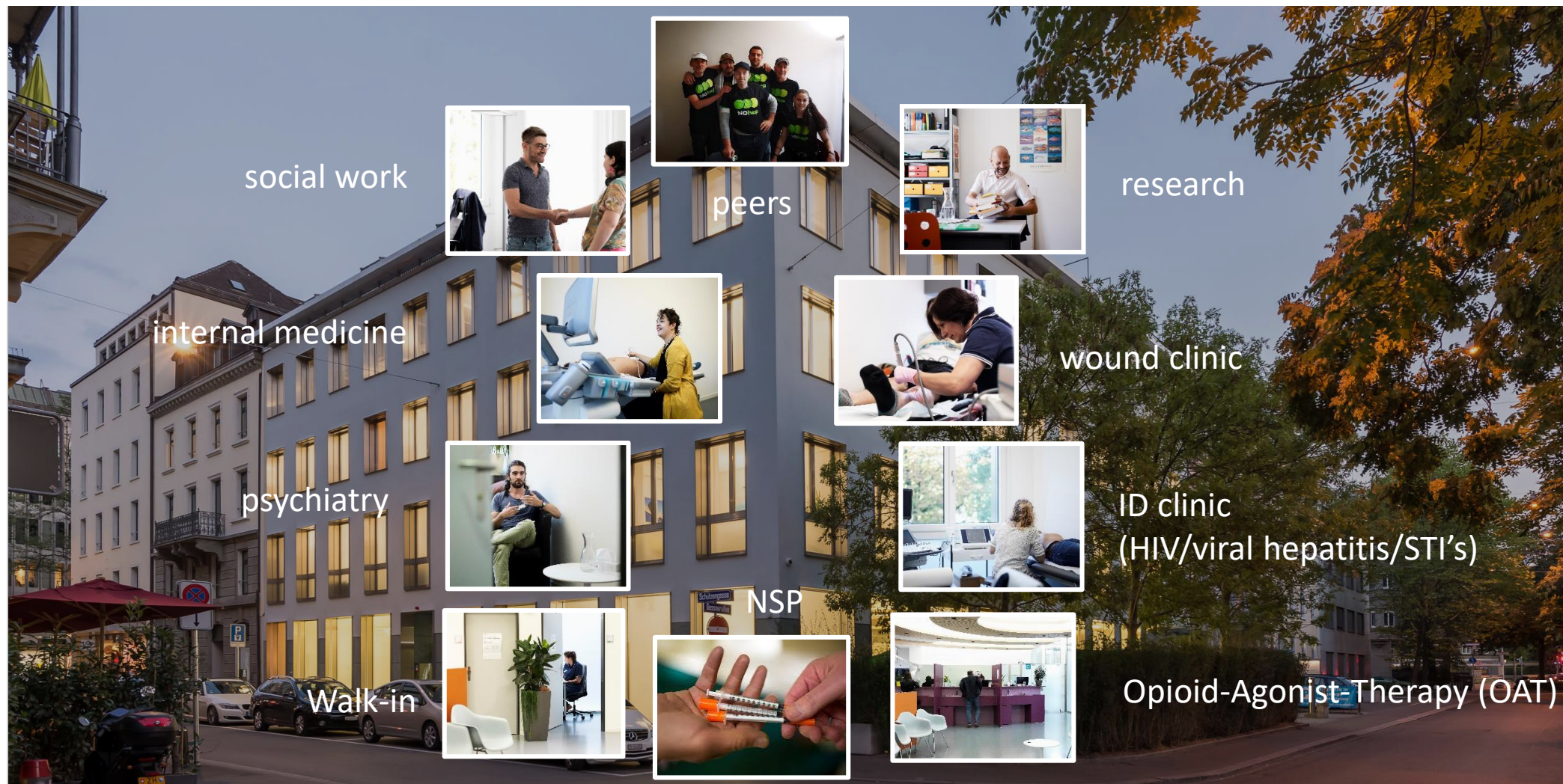[3]Institute for Epidemiology, Biostatistics and Preventive Medicine, University Zurich, Switzerland

INHSU2021 short oral presentation

Acknowledgement:
Thanks to all participants of this study

Disclosure:

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# Arud – integrated, comprehensive addiction care



social work

peers

research

internal medicine

wound clinic

psychiatry

ID clinic
(HIV/viral hepatitis/STI's)

NSP

Walk-in

Opioid-Agonist-Therapy (OAT)

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# Background: People in OAT and COVID-19
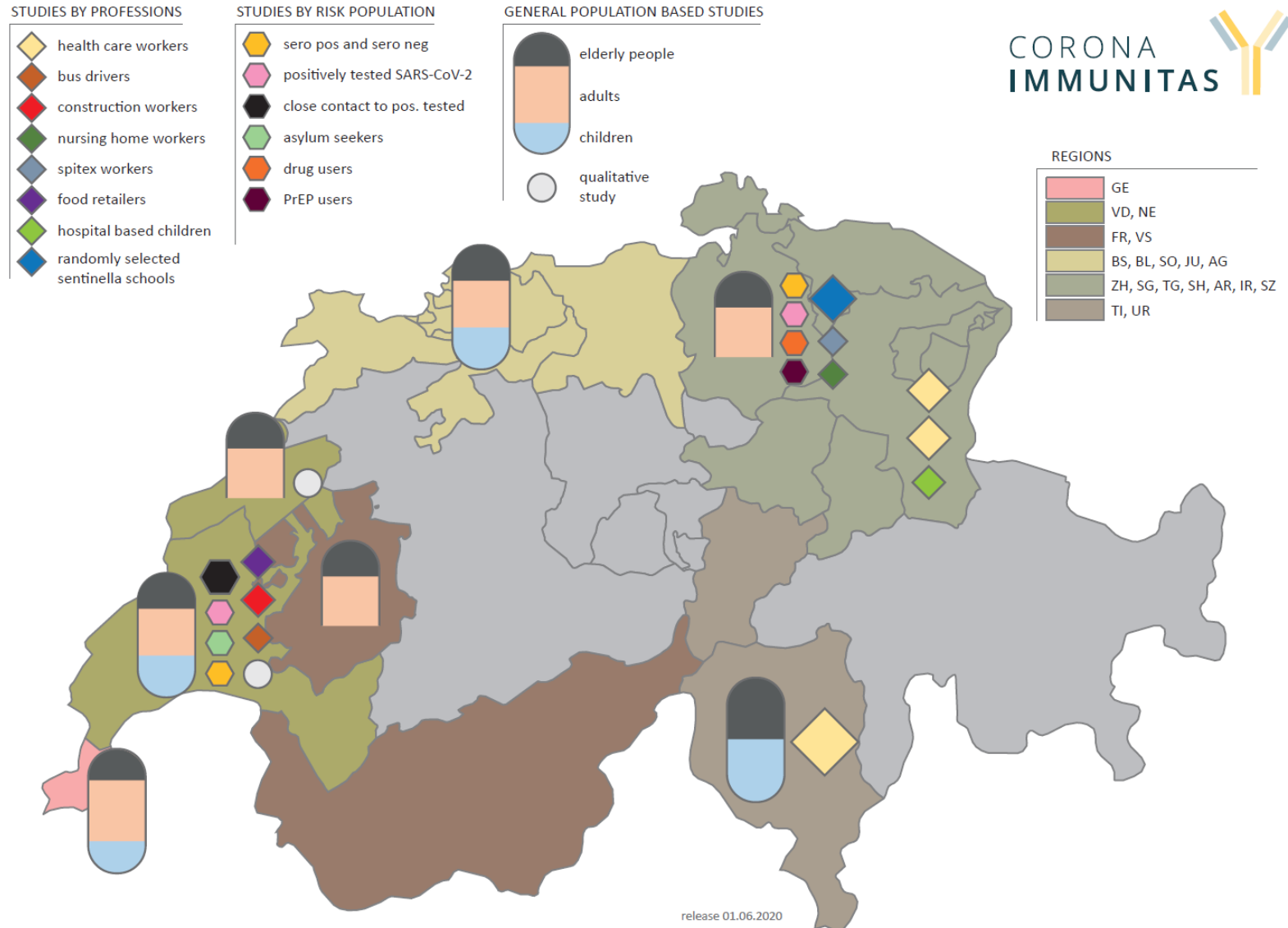
## At risk for severe COVID-19

- liver cirrhosis
- COPD
- cardiovascular diseases
- HIV

## At elevated risk of being infected

- living situation
- substance procurement
- limited access to protection measures



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# Corona Immunitas Study
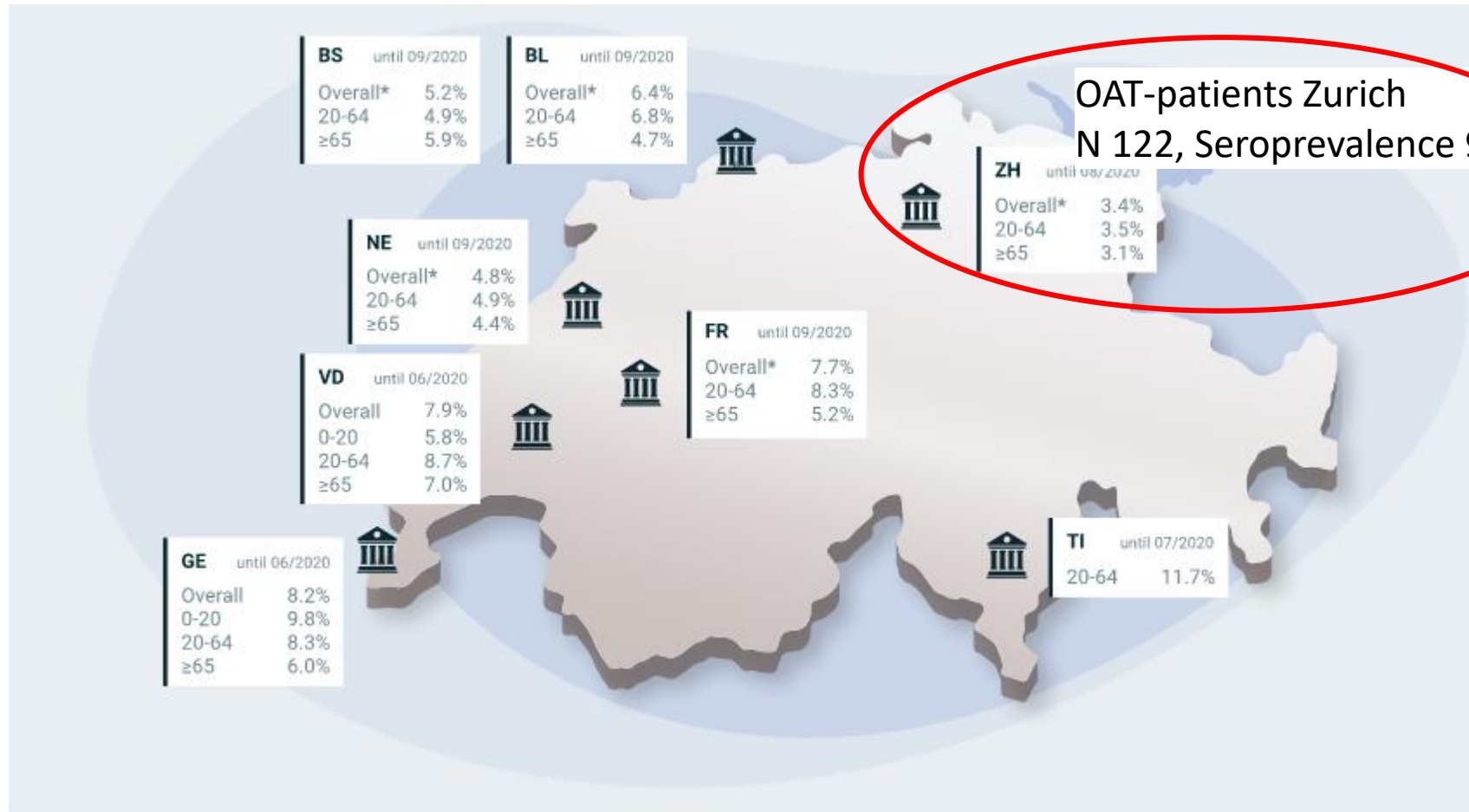


release 01.06.2020

# Results

**Table 1**

| Characteristics of the study participants' compared with the population-based sample | | Population sample n = 472 | OAT patients sample n = 122 | P[1] |
|---|---|---|---|---|
| *Trait* | *Value(s); (unit or explanation)* | | | |
| Age | mean (sd); (Years, Population: 20 to 64, OAT: 18 to 72) | 44.7 (11.7) | 44.3 (9.4) | 0.727 |
| Sex | n (%); Male | 226 (47.9%) | 85 (69.7%) | < 0.0001 |
| BMI | mean (sd); (kg/m2) | 24.9 (4.9) | 24.5 (4.1) | 0.407 |
| Sitizenship | n (%); Swiss | 358 (75.8%) | 98 (80.3%) | 0.300 |
| Education | n (%); Primary | 13 (2.8%) | 32 (26.2%) | < 0.0001 |
| | n (%); Secondary | 185 (39.2%) | 64 (52.5%) | 0.008 |
| | n (%); Tertiary | 268 (56.8%) | 11 (9.0%) | < 0.0001 |
| Household size | n (%); No other people in the same household | 70 (15.0%) | 55 (45.1%) | < 0.0001 |
| | n (%); One other people in the same household | 176 (37.6%) | 33 (27.0%) | 0.029 |
| | n (%); Two ore more other people in the same household | 144 (47.4%) | 27 (22.1%) | < 0.0001 |
| Chronic conditions* | n (%); No chronic condition | 378 (80.3%) | 58 (47.5%) | < 0.0001 |
| | n (%); At least one chronic condition | 93 (19.7%) | 64 (52.5%) | |
| Smoking status | n (%); Current smoker | 117 (24.8%) | 105 (86.1%) | < 0.0001 |
| | n (%); Ex-smoker | 252 (53.5%) | 10 (8.2%) | |
| | n (%); Never smoker | 102 (21.7%) | 5 (4.1%) | |
| Health related quality of life limitations (Eq5d-5l) | n (%); Yes, Walking around problems present (2 to 5 = yes) | 45 (9.5%) | 30 (24.6%) | < 0.0001 |
| | n (%); Yes, Self care problems present (Washing or dressing myself etc., 2 to 5 = yes) | 5 (1.1%) | 12 (9.8%) | < 0.0001 |
| | n (%); Yes, Problems performing daily activities present (2 to 5 = yes) | 36 (7.6%) | 35 (28.7) | < 0.0001 |
| | n (%); Yes, Pain or physical discomfort present (2 to 5 = yes) | 134 (28.4%) | 63 (51.6%) | < 0.0001 |
| | n (%); Yes, Anxiety or depression presemt (2 to 5 = yes) | 117 (24.8%) | 55 (45.0%) | < 0.0001 |
| | mean (sd) Selfrating of actual health status (VAS; 0 =worst to 100 = best) | 85.3 (11.6) | 69.1 (18.8) | < 0.0001 |
| Episodes of symptoms | n (%); No episodes of symptoms in 2020, at least for 3 days | 190 (40.3%) | 78 (63.9%) | < 0.0001 |
| | n (%) One ore more episodes in 2020, at least for 3 days | 282 (59.7%) | 44 (36.1%) | |
| Adherence to recommended precaution measures | mean (sd) Disctancing in the past 7 days (1 = never to 5 = allways) | 4.1 (0.7) | 3.8 (1.3) | < 0.001 |
| | mean (sd) Stay at home in the past 7 days (1 = never to 5 = allways) | 3.2 (1.1) | 3.2 (1.4) | |
| | mean (sd Wearing face mask in the past 7 days (1 = never to 5 = allways) | 3.0 (1.2) | 3.8 (1.2) | < 0.0001 |
| | mean (sd) Hygiene measures (washing hands etc., 1 = never to 5 = allways) | 4.6 (0.6) | 4.4 (0.8) | 0.003 |
| Previous SARS-CoV-2 test results | n (%); Tested positive | 0 (0.0%) | 1 (0.8%) | 0.052 |
| | n (%); Tested negative | 41 (8.7%) | 29 (23.8%) | < 0.0001 |
| | n (%); No test done | 429 (91.1%) | 88 (72.1%) | < 0.0001 |
| SARS-CoV-2 in immediate environment | n (%); No people in immediate environment previously testet positive | 424 (89.8%) | 114 (93.4) | 0.226 |
| | n (%); One people in immediate environment previously testet positive | 17 (3.6%) | 3 (2.5%) | 0.549 |
| | n (%); Two or more people in immediate environment previously testet positive | 31 (6.6%) | 5 (4.1%) | 0.304 |
| Trips taken outside the country | n (%); No trips since January 2020 | 251 (53.2%) | 109 (89.3%) | < 0.0001 |
| | n (%); One trip since January 2020 | 110 (23.3%) | 8 (6.6%) | |
| | n (%); Two ore more trips since January 2020 | 111 (23.5%) | 5 (4.1%) | |

BMI = Body-Mass-Index; SARS-CoV-2 = Severe Acute Respiratory Syndrome Coronavirus 2 Infection

*) Excluding allergies

1) Significance of two-sided test; Chi square for categorical variables; independet samples t-test for continuous variables
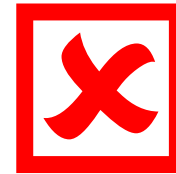
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# Results



BS — until 09/2020
Overall* 5.2%
20-64 4.9%
≥65 5.9%

BL — until 09/2020
Overall* 6.4%
20-64 6.8%
≥65 4.7%

NE — until 09/2020
Overall* 4.8%
20-64 4.9%
≥65 4.4%

VD — until 06/2020
Overall 7.9%
0-20 5.8%
20-64 8.7%
≥65 7.0%

FR — until 09/2020
Overall* 7.7%
20-64 8.3%
≥65 5.2%

ZH — until 08/2020
Overall* 3.4%
20-64 3.5%
≥65 3.1%

GE — until 06/2020
Overall 8.2%
0-20 9.8%
20-64 8.3%
≥65 6.0%

TI — until 07/2020
20-64 11.7%

OAT-patients Zurich
N 122, Seroprevalence 9.8%

CORONA IMMUNITAS

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# Conclusion: People in OAT and COVID-19

## At risk for severe COVID-19

- liver cirrhosis
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## At elevated risk of being infected

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# Acknowledgements

**Arud Team:**

| | |
|---|---|
| Tina Horschick | Mirjam Kälin |
| Romi Ledermann | Franciska Brezan |
| Andrea Zumbühl | Patrick Miller |
| Nadja Pauli | Andreas Hüttenmoser |
| Denise Hitz | Oli Wehrli |
| Astrid Götz | Marcel Kägi |
| Regina Esser | Sam Murbach |
| Claudia Bernardini | Anton Kohler |
| Lina Hijazi | Martin Luck |

**Corona Immunitas Zurich-Team:**

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# Thank you for your attention!

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