

Mark Lebwohl Webinar Summary – 19 March 2020 8 pm

Immunosuppression and Immunomodulation in the time of COVID-19

- TL;DR - Bottom line is no one has data on this, these recommendations are based on inference, past experience and publications, data from pivotal trials, and are fluid and subject to change.
- **Stop all immunoreactive medications with highly suspicious symptoms or confirmed infection of SARS-CoV-2/COVID-19**

Hypothesized Immunomodulation Risk Heierarchy for COVID-19

	Medications	Risks	Actions
Danger	Prednisone/CsA	<ul style="list-style-type: none"> • Strong IS 	<ul style="list-style-type: none"> ○ Do not start unless unavoidable ○ Aggressive patient protection measures
	MTX/MMF	<ul style="list-style-type: none"> • Moderate/Strong IS • Known risk of worse viral disease 	<ul style="list-style-type: none"> ○ Caution against new starts ○ Aggressive patient protection measures
Safer	tofacitinib	<ul style="list-style-type: none"> • Mild/Moderate IS 	<ul style="list-style-type: none"> ○ Aggressive patient protection measures
	TNFi	<ul style="list-style-type: none"> • IM class with most IS profile • *One COVID-19 Death Reported 	<ul style="list-style-type: none"> ○ Consider changing to less IS class ○ Consider delaying therapy start ○ Moderate patient protection measures
	IL-12/23i	<ul style="list-style-type: none"> • IL-12 involved in antiviral response 	<ul style="list-style-type: none"> ○ Consider changing to IL-23i ○ Normal patient protection measures
Safer	IL-17i/IL-23i	<ul style="list-style-type: none"> • None known 	<ul style="list-style-type: none"> ○ Continue therapy ○ Consider delaying next dose until disease recurs ○ Normal patient protection measures
	Apremilast	<ul style="list-style-type: none"> • Not IS 	<ul style="list-style-type: none"> ○ Continue therapy ○ Normal patient protection measures
	Acitretin	<ul style="list-style-type: none"> • Not IS 	<ul style="list-style-type: none"> ○ Continue therapy ○ Normal patient protection measures
	Dupilumab/Omalizumab	<ul style="list-style-type: none"> • These IM also treat asthma, which is a risk factor for poor COVID-19 outcome • May be protective for bacterial superinfection in atopics 	<ul style="list-style-type: none"> ○ Do not stop therapy ○ Moderate/Aggressive patient protection measures

*Not addressed specifically: hydroxyurea, azathioprine—I would classify these similarly to MTX/MMF, and rituximab similar to prednisone/CsA. -JK

CsA – Cyclosporine A
 MTX – Methotrexate
 MMF – Mycophenolate Mofetil
 (Cytokine + I) – cytokine inhibitor
 IS – Immunosuppressant/Immunosuppression
 IM – Immunomodulator/Immunomodulation

Other Notes:

- ◆ Primary risk of stopping therapy is loss of efficacy, roughly 10-20% will not recover response (higher for dupilumab)
- ◆ Severe psoriatic, blistering, or atopic disease should be treated, moderate disease can delay or go for a safer option
- ◆ Patients on long-acting (Q12 week meds) may want to delay next dose if it's coming up in the next 1-2 months; however, Dr. Lebwohl is not necessarily recommending that as these medications are all in the safer classes
- ◆ Many IM/IS – IL-6i, adalimumab, baricitinib, etc. – are being investigated as **treatments** for COVID-19
- ◆ New webinar to update this next Thursday, March 26, 2020 at 8 pm, and whole talk should be available to stream this afternoon March 20, 2020 at <https://fallclinical.health/covid-19-live-streaming-event>