VACCINE SECOND DOSES | BOOSTERS

- **With the recent NACI recommendations that those with AZ or J&J should get an mRNA vaccine as the second dose – what should we advise those with a second AZ appointment booked (rebook for mRNA?) Or those that just had their second AZ dose already?**

I would say this is a personal decision based on the individual’s risk of exposure, risk tolerance, ability to schedule an mRNA vaccine, etc. Just because AZ + mRNA *might* be better doesn’t mean that getting two doses of AZ isn’t perfectly fine.

- **Patients who had two AZ vaccines are asking if they can get an mRNA vaccine soon.**

No policy decisions/announcements on this yet but given how many doses of mRNA vaccines Canada has ordered, I wouldn’t be surprised if people who got two doses of AZ will eventually be eligible to get a dose of an mRNA vaccine at some point.

- **Moderna monograph indicates booster dose to be given at 6-8 months; Pfizer says 6-12 months. Once the majority of the country has had their 2 doses, will we be looking at boosters then?**

Too early to say. We have to wait and see.

- **Will individuals who had first AZ vaccine with second mRNA vaccine have an option to get a second mRNA vaccine at some point to help with global passport restrictions – U.S. yesterday stated they may not accept AZ vaccine in their country and require two vaccines only that have approval in their country.**

Post-session update: At least one state (New York) has now adjusted its guidance to accept visitors vaccinated with a WHO-approved vaccine as well as vaccines approved by the U.S. FDA: [https://www.ctvnews.ca/health/coronavirus/springsteen-on-broadway-clears-way-for-astrazeneca-recipients-to-attend-show-1.5477545](https://www.ctvnews.ca/health/coronavirus/springsteen-on-broadway-clears-way-for-astrazeneca-recipients-to-attend-show-1.5477545)  

Too early to say. I saw that the Attorney General in Ontario said she will actively look at this and collaborate with other provinces for consistency about this and how we respond. Related (for those coming the other way – into Ontario) there is guidance here for those vaccinated outside Canada:
• The U.S. will not allow people who have AZ vaccinations. Can we help those individuals e.g., provide them with a 3rd vaccination of mRNA vaccine? Your advice?

See post-session update in response to previous question.
Good question about this recent announcement, I know the Government/Attorney General said yesterday they are actively looking at this and trying to alignment across the country on how the manage this.

• Any thoughts on whether Canada’s approach to off-label vaccine schedules (e.g., delayed intervals and mix and match approach) might actually be problematic when it comes to global travel/vaccine passports? I am a little concerned the mRNA interchangeability recommendation by NACI will be misused by vaccine clinics to offer second doses that serve clinic convenience more than matching first dose.

Other countries are delaying second dose (e.g., UK) and using mix-and-match approaches (e.g., many countries in Europe that have stopped using AZ). I don’t think these factors will impact vaccine passports.

• When are the UK results for mix and match vaccine study being released?

Supposed to be in June - still 12 days left this month...

• Can you please comment on Novavax? What kind of vaccine is it? Do we have data on its efficacy/safety? Will we have it in Canada and if so- when?

Novavax is a recombinant nanoparticle protein-based COVID-19 vaccine (so different from the mRNA vaccines and AZ, which is a viral vector vaccine). The data suggest it has high efficacy and good safety. Novavax is still under review by Health Canada - not sure when it will be approved.

• Any guidance for foreign travellers who have received Sinopharm vaccinations (x2) abroad and requirements for mRNA vaccination when arriving back in Canada for better immunity? | What should we do for patients who received a vaccine abroad e.g., Sputnik or Sinovac as their first dose?

New Ontario guidance here on how to manage those vaccinated outside Canada according to what they were vaccinated with (approved or not) and how many doses. Bottom line: if not approved, need to restart series:
**ANTI-BODY TESTING**

- Can you advise about patients asking about antibody testing? Dynacare offering antibody testing against spike protein. Cost $75. Is this test meaningful?

*Answered post-session by Dr. Allison McGeer:* There is nothing wrong with people who can afford it spending the money on an antibody test, either because they think that they have been infected, or because they want to know if they have antibodies after vaccination. And people who have detectable antibodies may feel better knowing this (and most people, even most immunocompromised people, after two doses of vaccine, will have detectable antibodies). There is some evidence (although not a lot) that suggests that your levels of neutralizing antibody are correlated with protection, and that your levels of overall antibody (what the Dynacare test measures) are correlated with your levels of neutralizing antibody.

The Dynacare test, however, just gives you a positive or negative, and we do not know how that positive/negative correlates with protection. If you don’t have antibodies, it could be that they have declined to a level below that detectable in the Dynacare test, but you might still have enough to be protected, or you might be protected by your T cell immunity. There is a single study looking at third doses in immunocompromised adults, which says that third doses might have some benefit, but it doesn’t look large, and we don’t know enough yet to recommend third doses. So, the short version is that the reason that the government doesn’t pay for it is that results aren’t actionable. This may change over time....

- A young adult renal transplant, keen to return to her pre-COVID lifestyle, is concerned about her widely quoted possible lack of robust immune response and is requesting antibody testing for reassurance. What can I tell her?

*[For more, see response above from Dr. Allison McGeer re antibody test.]* This has come up previously on a session. “The old antibody tests were antibody against nucleocapsid, which can tell you if you have been infected, but don’t detect antibody to spike, which is what is in the vaccine. So, you need to check that the antibody test detects spike. What Dynacare is offering detects spike; I’m not sure whether LifeLabs has switched. However, we don’t know if a third dose will help in severely immunocompromised folk”.

- What information is available to respond to requests by patients to test their immunity levels after vaccination? e.g., the Dynacare spike protein antibody test?


**VACCINE TIMING | ALLERGIES**

- When can a patient get the COVID vaccine if symptomatic post-infection with loss of smell/ taste since December?

They can get the vaccine. Some non-published evidence out of UK suggesting that vaccine can improve post-acute COVID conditions too.
• Interval between COVID vaccine and others i.e., tdap in high-risk pregnancies, can the interval be lower than 4 weeks?

Guidance now is still 28 days, although this is about safety (vs immune impacts). I haven’t seen advice on shortening this in high-risk situations.

• CDC says there is no need to consider timing of other vaccines and COVID vaccines. Are we in Canada and at our clinics following that? What about the timing of Prolia, and other non vaccine injections?

We are not following the CDC’s guidance yet, but I suspect we will be in the future. It’s just harder to tease out attribution of AEFIs [adverse events following immunization] if we don’t spread out the vaccines (or non-vaccine injections) temporally.

• I was working in vaccination clinic and question of waiting one week after Prolia came up. Prolia is not immune suppressive, why the wait? This becomes an obstacle.

Yes, per Osteoporosis Canada an interval of 4−7 days between an injection of denosumab (Prolia) or romosozumab (Evenity) and the COVID−19 vaccination is recommended. But if it happens at the same time likely no immune impact. https://osteoporosis.ca/covid-19-vaccination-and-osteoforosis-drug-therapy-
blog/#:~:text=An%20interval%20of%204%2D7,any%20local%20injection%20site%20reactions.

• Are there any precautions (timing in particular) advised for administration of Pollinex-R (annual preseason ragweed specific immunotherapy) with COVID-19 vaccination? Can COVID-19 vaccine be given at any time during the 4-week schedule? The product monograph does speak to possible reduced effectiveness.

I know allergy shots have a 48-hour interval from vaccination. We’ve been referencing the American Academy of Allergy and Immunology I would check here. https://education.aaaai.org/resources-for-a-
i-clinicians/immunotherapy-qa_COVID-19

• Rash, face swelling post first dose of Moderna, can she take dose two? Which vaccine would be recommended?

In this case with the facial swelling, I’d consult an allergist for advice, she may well be able to take the second dose of Moderna with closer observation.

• I have a young patient who developed hives after her Pfizer shot. Does she need an allergy test/referral before receiving her second dose?

The guidance is only a severe/anaphylaxis allergy is a contraindication, so you are fine to go ahead. You can however ask for an allergist/immunology consult – eConsult is also an easy option if you aren’t sure. https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources/covid-19-vaccines/covid-vax-special-populations.pdf

• Can you suggest what to tell people when they state they are magnetized after getting Pfizer vaccine? It seems to be a popular myth among antivaxxers.

Very good information here from CEP on these conversations when you are dealing with this misinformation - your role as trusted source will go a long way to shifting towards confidence. https://tools.cep.health/tool/covid-19-vaccines/#ensuring-patient-confidence-in-vaccines
POST-VACCINE MYOCARDITIS | CHILDREN

- Given the myocarditis signal in those receiving mRNA vaccines age 12-24, should we be delaying the 2nd dose until more data comes in from the US? Is it possible kids/adolescents may only need one dose?

Right now, the recommended interval between doses in this age group is 56 days. I think we’ll know more in the coming weeks, before most kids who have received dose 1 will be eligible to get dose 2, so we’ll see. Will probably need some modelling to inform decision-making (lots of variables need to be taken into account).

- Is it possible the myocarditis has nothing to do with dose #2? Maybe it takes 4 weeks to manifest, similar to the time it takes when MISC presents? Could the 2nd dose be a red herring?

Great point – also under review. Some events occurred within days after first dose with no evidence of acute COVID-19.

- Long-term sequelae of mild myocarditis?

Following immunization, in U.S. data: among discharged patients, 41 (19%) had ongoing signs or symptoms or unknown status.

- Incidence rate of myocarditis post vaccination? 6 in 100,000?

Early vaccine safety data suggests rate of 16 cases/1 million 2nd doses (CDC report to FDA).

- Can you comment on severity of Delta variant COVID symptoms in children?

We have not seen increased severity of pediatric disease with the Delta variant compared with other variants - but with a more transmissible virus, the denominator will increase, raising concern about more rare events.

- Dr. Thampi mentioned children who are at high risk for complications from COVID-SARS2 infection. Maybe I missed it, but other than being in a hot spot, what to look for in a child to say that they are at higher risk from infection or not?

Kids with immune-compromising conditions who may rely on 2nd dose to confer protection.

OTHER

- It looks like the Delta variant presents differently than the Alpha variant and original virus. Is it a milder infection?

It is actually more likely to cause severe infection, but in the UK most cases are among younger age groups (probably because they aren’t vaccinated yet) so it may appear to be a milder infection.

- There are strong rumors that phone visit codes will not be continued beyond September. For those of us with tiny waiting rooms, how are we going to manage? Those in FHG/FFS
cannot continue to space patients apart in terms of times of appointment spacing and be expected to pay the bills if/when this is all in-person visits.

I know the OMA is actively discussing the virtual care codes with MOH. We definitely need to maintain these codes and be remunerated for this work that our patients want and need.

- Could you please share any evidence-based guidelines regarding cleaning furniture in the office? Is it time to go back to pre pandemic?

The best summary I have seen was via the Lancet, no new change in the guidance in Canada/Ontario https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30561-2/fulltext#back-bib8

- I hear vaccine info should be arriving on HRM, but I haven’t received any even though I know some patients who have had the vaccine this past week.

Lots of info here from OntarioMD about the HRM notifications. If you want more details, reach out to OntarioMD https://www.ontariomd.ca/documents/resource%20library/hrm-covaxon%20bulletin%20for%20physicians%20june%202021.pdf

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These additional questions were answered live during the session. To view responses, please refer to the session recording.

- Myocarditis update with mRNA vaccines please.
- Please speak about the severity of COVID in kids/teens and importance of vaccination for those parents who are hesitant.
- How should we advise our seniors who are now double vaccinated and now want to go to grocery stores and patios, given Delta variant, and where we are now?
- Myocarditis with Pfizer. Like to know more about it please.
- How long do those wait after first AZ vaccine before getting second mRNA vaccine-8 or 12?
- Please help with guidance for "reopening" our clinics, and how to deal with staff who are afraid to or reluctant to provide care to non-vaccinated patients.
- What is the optimal interval for 2nd dose mRNA post AZ (8 weeks? 10 weeks? 12 weeks?)?
- Many kids in Toronto are getting 2nd doses at 21 days due to pop up clinics being available as Toronto is a hot spot. Should we be telling those families to wait longer before a 2nd dose?