## SNMMI Statement: The Effect of COVID-19 Vaccination on FDG PET/CT

On March 30, SNMMI released the following statement on FDG-avid reactive lymphadenopathy on PET/CT in patients following COVID-19 vaccinations:

eactive lymphadenopathy has been reported in up to 16% of patients following COVID-19 vaccination with the mRNA (Pfizer/BioNTech, Moderna) vaccines; this side effect has not been reported to date with the AdV vector vaccine (Janssen/Johnson & Johnson) (*1*–5). Some guidelines (National Comprehensive Cancer Network) recommend delay of imaging by 4–6 weeks following the COVID-19 vaccine if it will not affect patient outcomes (2). It is not known at this time if delaying imaging by 6 weeks after the second dose of COVID-19 vaccine is sufficient to ensure resolution of FDG-avid lymphadenopathy.

As with some other vaccinations, such as the influenza vaccine, FDG uptake can also occur at the COVID-19 vaccine injection site. Development of FDG-avid lymphadenopathy is generally ipsilateral to the site of vaccine injection. In addition to the axillary nodes, lymph nodes in the ipsilateral lower internal jugular and supraclavicular stations may also demonstrate FDG uptake. Physicians in the SNMMI COVID-19 Task Force have also anecdotally observed splenomegaly/increased splenic uptake following COVID-19 vaccination. Additional information will be shared on this platform as it becomes available.

The COVID-19 Task Force makes the following recommendations based on the currently available information (1-7):

 Recognize that FDG-avid lymphadenopathy can occur in the axillary (and possibly lower cervical/supraclavicular) station(s) ipsilateral to the site of injection and can be seen for 4–6 weeks or longer after the most recent dose of vaccine.

- Patient questionnaires should be revised to include information about the date(s) and site(s) of vaccination and which vaccine was administered.
- For patients with a history of breast and head and neck cancers, the vaccine should be administered in the contralateral arm whenever possible.

## **REFERENCES**

- Doss M, Nakhoda SK, Li Y, Yu JQ. COVID-19 vaccine-related local FDG uptake. Clin Nucl Med. 2021;46(5):439–441.
- National Comprehensive Cancer Network. Recommendations of the NCCN COVID-19 Vaccination Advisory Committee. Available at: https://www.nccn.org/covid-19/ pdf/COVID-19 Vaccination Guidance V2.0.pdf. Accessed on April 19, 2021.
- Centers for Disease Control and Prevention. Local reactions, systemic reactions, adverse events, and serious adverse events: Pfizer-BioNTech COVID-19 vaccine. December 13, 2020. Available at: https://www.cdc.gov/vaccines/covid-19/info-by-product/pfizer/reactogenicity.html. Accessed on March 6, 2021.
- Centers for Disease Control and Prevention. Local reactions, systemic reactions, adverse events, and serious adverse events: Moderna COVID-19 vaccine. December 20, 2020. Available at: https://www.cdc.gov/vaccines/covid-19/info-by-product/moderna/reactogenicity.html. Accessed March 6, 2021. 2021.
- Centers for Disease Control and Prevention. Local reactions, systemic reactions, adverse events, and serious adverse events: Janssen COVID-19 vaccine. February 26, 2021. Available at: https://www.cdc.gov/vaccines/covid-19/info-by-product/janssen/reactogenicity.html. Accessed on March 6, 2021.
- Grimm L, Destounis S, Dogan B, et al. Society of Breast Imaging: SBI recommendations for the management of axillary adenopathy in patients with recent COVID-19 vaccination. Available at: https://www.sbi-online.org/Portals/0/ Position%20Statements/2021/SBI-recommendations-for-managing-axillary-adenopathypost-COVID-vaccination.pdf. Accessed on March 8, 2021.
- Lehman CD, Mendoza DP, Succi MD, et al. Unilateral lymphadenopathy post COVID-19 vaccination: A practical management plan for radiologists across specialties. J Am Coll Radiology. 2021. Published on March 4 ahead of print.

## SNMMI Fellowships for NCTN Cooperative Group Participation

he National Cancer Institute (NCI) National Clinical Trials Network (NCTN) cooperative cancer groups include the ECOG-ACRIN Cancer Research Group, Alliance for Clinical Trials in Oncology, Children's Oncology Group, SWOG Cancer Research Network, and NRG Oncology. The cooperative groups are important drivers for the future practice of oncology patient management. With the increasing importance of radiopharmaceutical therapies, nuclear medicine physician participation in the design and implementation of NCTN clinical trials is essential. To help ensure that nuclear medicine physicians have an active voice in the activities of these groups, the SNMMI Value Initiative approved in March the creation of 6 Cancer Cooperative Group Junior Faculty Mentorship Awards. This 1-year award will support nuclear medicine physician participation at 2 in-person cooperative cancer group meetings and will provide \$2,000 to cover costs

of travel to the meetings. To encourage this participation, the new grants will pair each junior faculty member with a senior member in the respective cooperative groups.

To kick off this initiative, 21 junior and senior nuclear medicine physicians participated on March 24 in a conversation with Lalitha Shankar, MD, PhD, Chief, NCI Clinical Trials Branch. Dr. Shankar gave an overview of the cooperative group structure, advised the junior members on opportunities in each, and answered questions in an informative and interactive discussion period. This group will continue to meet biannually, and Dr. Shankar will present a continuing education session on the activities of the NCTN at the SNMMI Annual Meeting in June. Additional eligibility and application information is posted on the SNMMI website at Cancer Cooperative Group Junior Faculty Mentorship Award (smarterselect.com).

**SNMMI**