Health Watch USA℠

Member of the National Quality Forum and a designated "Community Leader" for Value-Driven Healthcare by the U.S. Dept. of Health and Human Services

RE: Written Comment Regarding February 22-24, 2023, CDC ACIP Meeting Feb. 10, 2023

Another important reason for updating the COVID-19 vaccine's formulation is the mounting evidence of significant immunological imprinting which occurs with SARS-CoV-2 or vaccine exposure. In other words, your first exposure to the virus shapes your immunological response to all future exposures.

It was evident from the data presented at the Sept. 1, 2022, ACIP meeting where all animals were vaccinated with the original SARS-CoV-2 strain, and then had a robust antibody production to the original viral strain with the Monovalent BA4/5 booster.(1,2) In addition, booster efficacy data from a number of other studies have shown what some would describe as a less than expected advantage of the bivalent booster over the original booster.(3,4)

This along with other laboratory findings suggests immune imprinting is taking place.(5, 6, 7, 8)

Thus, it would appear advantageous to administer to SARS-CoV-2 immunologically naive individuals, such as young children, the most immunologically diverse and up-to-date vaccine possible.

I would like to encourage the committee to approve the administration of the current SARS-CoV-2 bivalent formulation to young children and to update this formulation on a regular basis.

Finally, similar to the previous booster recommendations, bivalent boosters for immunocompromised and high-risk individuals should be available every 5 to 6 months, until clinical outcomes regarding the durability of protection against SARS-CoV-2 are known.(9)

Thank you,

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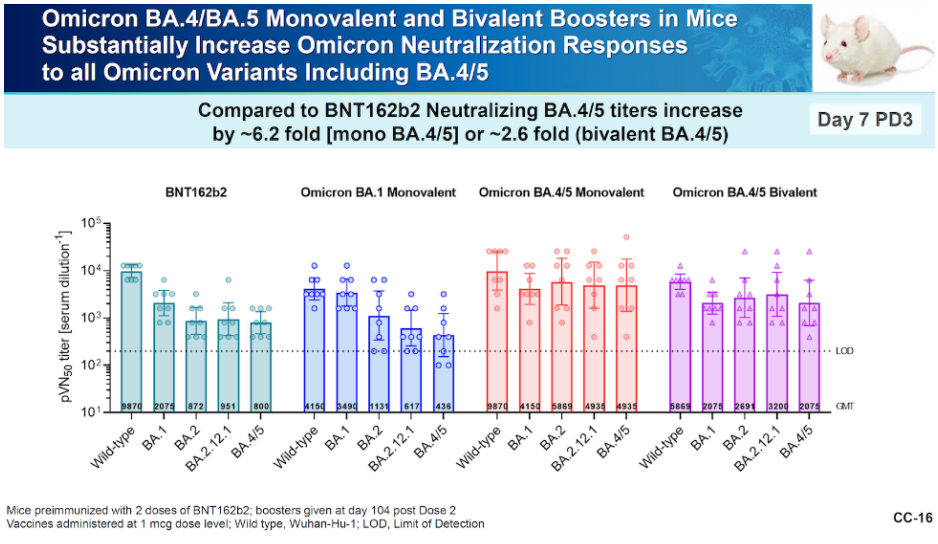

References:

1. Kavanagh KT. Immune Imprinting and the Prevention of Spread. Infection Control Today. Dec. 27, 2022. https://www.infectioncontroltoday.com/view/immune-imprinting-prevention-spread

2. Kavanagh KT. The Autumn COVID-19 Booster Is Here: Is it Safe and Effective? Infection Control Today. Sept. 2, 2022. https://www.infectioncontroltoday.com/view/the-autumn-covid-19-booster-is-here-is-it-safe-and-effective-

3. Kavanagh, KT. Is the Current Bivalent Booster the Correct One? Studies Suggest it Isn't Infection Control Today. Nov. 1, 2022. https://www.infectioncontroltoday.com/view/is-the-current-bivalent-booster-correct-one-studies-suggest-it-isn-t

4. Faust J. Is the Bivalent Booster Any Better Than the Original? MedPage Today. Jan. 29, 2023. https://www.medpagetoday.com/opinion/faustfiles/102845

5. Brazil R. How your first brush with COVID warps your immunity. Nature News Feature. Jan. 18, 2023. https://www.nature.com/articles/d41586-023-00086-1

6. Delgado JF, Vidal-Pla M, Moya MC, et al. SARS-CoV-2 Spike Protein Vaccine-Induced Immune Imprinting Reduces Nucleocapsid Protein Antibody Response in SARS-CoV-2 Infection. J Immunol Res. 2022 Jul 29;2022:8287087. doi: 10.1155/2022/8287087. PMID: 35935586; PMCID: PMC9355782. https://pubmed.ncbi.nlm.nih.gov/35935586/

7. Wheatley AK, Fox A, Tan HX, et al. Immune imprinting and SARS-CoV-2 vaccine design. Trends Immunol. 2021 Nov;42(11):956-959. doi: 10.1016/j.it.2021.09.001. Epub 2021 Sep 15. PMID: 34580004; PMCID: PMC8440232. https://pubmed.ncbi.nlm.nih.gov/34580004/

8. Röltgen K, Nielsen SCA, Silva O, et al. Immune imprinting, breadth of variant recognition, and germinal center response in human SARS-CoV-2 infection and vaccination. Cell. 2022 Mar 17;185(6):1025-1040.e14. doi: 10.1016/j.cell.2022.01.018. Epub 2022 Jan 25. PMID: 35148837; PMCID: PMC8786601. https://pubmed.ncbi.nlm.nih.gov/35148837/

9. Kavanagh K. COVID-19 Booster Shots for Older Americans Might be Needed. Infection Control Today. Aug. 2, 2021. https://www.infectioncontroltoday.com/view/covid-19-booster-shots-for-older-americans-might-be-needed