



Bioscience Association of North Dakota
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Greetings Chairman Senator Lee and Esteemed Members of the Human Services Committee:

The Bioscience Association of North Dakota opposes SENATE BILL NO. 2384, A Bill relating to prohibiting the use of vaccines developed using messenger ribonucleic acid technology in the state; and to provide a penalty. The Association urges the Committee to enter a “DO NOT PASS” RECOMMENDATION TO THE FULL House.

The Association opposes SB 2384 on the following grounds:

- 1). It is overly broad;
- 2). It will deny lifesaving treatments to the citizens of North Dakota;
- 3). It will dampen development of the Biotech Industry in North Dakota.

The Statute prohibits “a person “from” providing or administering a vaccine developed using messenger ribonucleic acid technology for use in an individual or any other mammal in this state”. It not only prohibits the use of an FDA approved current vaccines but is prospective in that prohibits use of other vaccines being developed utilizing mRNA. For more than 30 years, scientists have been studying mRNA vaccines to prevent diseases such as: Cytomegalovirus (CMV); Influenza (flu); Rabies; and Zika virus. Scientists are also studying mRNA vaccines to treat diseases like multiple sclerosis (MS) and cancer. These treatments use the same mRNA technology to trigger the immune system to create antibodies. Though they aren’t approved yet, these treatments are currently in clinical trials. This Statute is overly broad in that not only prohibits current **FDA approved vaccines**, but future FDA approved vaccines.

“There’s a lot of enthusiasm around mRNA right now,” said Patrick Ott, M.D., Ph.D., who directs the Center for Personal Cancer Vaccines at the Dana-Farber Cancer Institute. “The funding and resources that are flowing into mRNA vaccine research will help the cancer vaccine field.”

“Dozens of clinical trials are testing mRNA treatment vaccines in people with various types of cancer, including pancreatic cancer, colorectal cancer, and melanoma. Some vaccines are being evaluated in combination with drugs that enhance the body’s immune response to tumors.”

“mRNA vaccine technology is extremely promising for infectious diseases and may lead to new kinds of vaccines,” said Elad Sharon, M.D., M.P.H., of NCI's Division of Cancer Treatment and Diagnosis. “For other applications, such as the treatment of cancer, research on mRNA vaccines also appears promising, but these approaches have not yet proven themselves.” (National Cancer Institute, “Can mRNA Vaccines Help Treat Cancer? January 20, 2022, by Edward Winstead).

This Statute prohibits research at our two research Universities and in local companies who are engaged in these endeavors because it states, “may not provide or administer a vaccine developed using messenger ribonucleic acid technology for use in an individual **or any other mammal in this state.**” A Researcher cannot even inject this in animals, such as mice or rats, to find out the effects. They have cut out a vital part of medical

research in the critical “proof of concept” phase of drug development.

And if these mRNA vaccines prove successful and become FDA approved, this Statute denies the citizens of North Dakota potential lifesaving Federally approved vaccines. What that means is that these new treatments will be available to citizens of other States but not in North Dakota.

This, in my opinion, will certainly have a “dampening effect on” research, development and manufacture” in North Dakota. Many companies who engaged in this type of research, development and manufacture will not consider relocating here. In my opinion, we are going to fall behind.

In conclusion, I would like to say, North Dakota is home to a unique ecosystem of bioscience early stage and manufacturing companies conducting research and commercialization efforts in the fight to create new and different treatments for some of the deadliest diseases. To shut down vaccine technology that is extremely promising for cancer and infectious diseases which may lead to new kinds of vaccines is very short sighted and will hamper the growth of the Biotech industry in this State. In my opinion it will reduce investment in this State which will lead to the diminishment of an industry which creates high-skilled, high-wave jobs that diversify the state’s economy, moderates facility operations, and supports the creation of improved standard of living and supports state and local taxes for education, public safety and other budget priorities.

This is why I urge you to pass a “DO NOT PASS” recommendation on SB 2384.

Thank you for your time and attention to this important piece of Legislation.

Respectfully Submitted

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