Can tobacco plant help cure Ebola?

It’s an eye-catching angle in the story of an experimental treatment for Ebola: The drug comes from tobacco plants that were turned into living pharmaceutical factories.

Using plants this way — sometimes called “pharming” — can produce complex and valuable proteins for medicines. That approach, studied for about 20 years, hasn’t caught on widely in the pharmaceutical industry.

But some companies and academic labs are pursuing it to create medicines and vaccines against such targets as HIV, cancer, the deadly Marburg virus and norovirus, known for causing outbreaks of stomach bug on cruise ships, as well as Ebola.

While most of the work in this area uses a tobacco plant, it’s just a relative of the plant used to make cigarettes.

“It’s definitely not something you smoke,” said Jean-Luc Martre, a spokesman for Medicago, a Canadian company that’s testing flu vaccines made with tobacco plants.

Scientists favor tobacco plants because they grow quickly and their biology is well understood, said Ben Locwin, a pharmaceutical biotech consultant in Portsmouth, New Hampshire, who is considered an expert on plant-produced medicines by the American Association of Pharmaceutical Scientists.

Read the full, original story: Ebola puts focus on drugs made in tobacco plants