

## Startup creates VetiGel, a plant based polymer that seals wounds in seconds

November 21 2014, by Bob Yirka



(Medical Xpress)—Brooklyn based startup Suneris has developed a plant based polymer called VetiGel that can be used to seal virtually any type of wound in just 15 to 20 seconds, potentially saving lives—cofounded by Joe Landolina, who is now the CEO of the company, the gel is already being used by veterinarians to treat animal wounds.

Treating wounds where there is a lot of <u>bleeding</u> is time based—if the bleeding isn't stopped, the patient will die, known as bleeding out.

Currently, there are some gel based products for stopping bleeding but



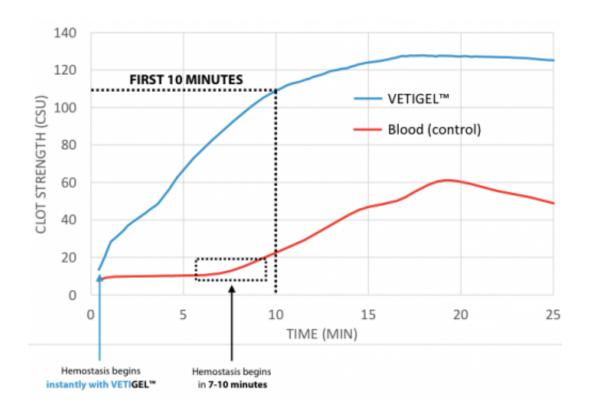
they are mostly used for superficial cuts. Other gels for more serious wounds can typically take up to five or ten minutes to stop rapid blood loss—VetiGel can get the job done in just 15 to 20 seconds, an improvement that could no doubt mean the difference between life and death for someone with a serious injury. Perhaps even more remarkable, the gel works on both skin and organ injuries, sealing up bleeding in mere seconds—that could be a real game-changer for wounds to the liver, for example, a notorious bleeder.

Landolina told the press recently that he got the idea for the gel while still a freshman at NYU—he and a fellow student created the first version of the gel, leading to the formation of the company—the fellow student subsequently left the company afterwards, leaving Landolina to forge ahead with the new product.

The gel works by binding with components in blood and tissue (Landolina calls it akin to Lego-like building blocks). It's based on plant cell wall polymers which when exposed to blood or tissue, reassembles itself into a facsimile of blood or other body parts, allowing for very nearly instantaneous clotting. Thus when applied to a wound victim, part of the gel may morph to conform to the internal surface of a bleeding organ, another to a broken blood vessel and yet another to broken skin, stopping bleeding throughout.

The gel has been approved for use in animals by veterinarians, but still has a long way to go before it can be tried in humans. One group that has shown serious interest is the Department of Defense, who would like to see the gel used on wounded soldiers in the field.





## More information: <a href="mailto:suneris.co/"><u>suneris.co/</u></a>

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