



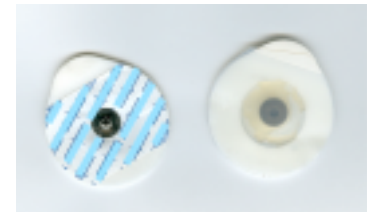
## **CONDUCTIVE APPLICATIONS FOR XENMED 18 HYDROCOLLOID ADHESIVE APPLICATIONS**

All hydrocolloids are inherently rubber-based, and, consequently, are not very conductive. Our Company, **XennMed™**, has not previously developed hydrocolloids for use in electro-conductive applications because at the industry standard thickness of 18-20 mils, it was just too thick (and expensive) to be seriously considered by the “electronic leads” (eLeads) industry for their various applications. With **XenMed 18™** now capable of being produced as thin as 12 mils (~305 mm), we have an outstanding opportunity to be the best eLead alternative in the industries requiring wet tack electronic leads for physiologic measuring instruments.

With our launch of our **EverLift™** technology, we have the added value of developing an eLead with the following characteristics:

- 1) **EverLift** technology enables us to employ a conductive netting placed at the skin adhesive interface and extending beyond the edge of the dressing like a “pull tab;”
- 2) This electro-conductive tab could be designed to connect with the electrode leads;
- 3) This tab could double as the “tab” to lift with a finger for removal; and
- 4) **EverLift** technology enables removal force reductions of over 30%.

Having promoted the new **EverLift** technology above, we also know that one of the market share leaders for EKG leads in the USA currently has a very effective “patch” using a donut-style acrylic with a conductive gel in the donut hole; this gel provides the interface between the skin and the electronic lead (See image nearby). The Mark I version of **XennMed’s** electronic patches could be quickly produced, including the inline lamination of foam backing, in the same manner using an intermediate converter company to provide the materials beyond the hydrocolloid, or our customer(s) may already have the capability to perform those functions. The measurement function would be the same as the current state-of-the-art, however, the benefits that would accrue the user(s) of our highly translucent **XenMed 18** would include, at least, the wet tack advantage of hydrocolloids, no need to shave the skin, and the ease of removal force (over 30% reduction) in our **EverLift** technology. Our customers launch in their markets within a few short months.



Although we have not yet studied this, the **XenMed 18** formulation currently includes Calcium Alginate as a component, which may already have acceptable conductivity for this application. Lastly, several alternative metallic additives could be put into the recipe and tested.

As an OEM supplier and co-developer, we suggest working with a marketing partner to get to market quickly with Mark I using gels or metallic salts, and concurrently beginning a development project surrounding all the options in Mark II.

Provided by David W Smith MD

Chief Technology Officer and Co-Manager of Xennovate Medical LLC

January 2006