Mucus layer on surface of cancer cells resists chemotherapy.

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The effectiveness of chemotherapy drugs is often limited by their capacity to penetrate their target cells. Unfortunately, tumor cells do not always make this process easy. Many have layers of thick oligosaccharide mucin chains, and these provide a physical barrier to the drugs. A recent study published by the American Institute of Physics has shown that cancer cells with these glycoprotein layers are more resistant to chemotherapy. The chemotherapy drug benzyl- α -GalNac, however, functions by inhibiting glycosylation and thus offers a viable option for overcoming this mechanical resistance to treatment.

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