

How purebred dogs are helping us fight cancer in humans

[Roughly a quarter of all purebred](#) dogs die of cancer, and 45 percent of those who live past the age of 10 succumb to one variety or another. Modern chemotherapies have allowed some of these dogs to get treatment, just like a human would. Those therapies work so well because canine cancers are so close to human tumors.

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[Many breeds are uniquely susceptible to specific types of cancer](#) purely because of their heritage. “If you’re a Scottish terrier, your odds of getting bladder cancer are 22 times higher than your average mutt,” explains [researcher Elaine] Ostrander. That’s a massively increased risk, and it’s likely because of a set of inherited mutations that we’ve inadvertently bred into the group. But the fact that they’re all likely to have almost exactly the same mutation makes them a convenient sample for research.

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But because all purebred dogs are as related to one another as we are to our immediate family members, every cancer they get is similar to the hereditary human cancers we already know about.

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[\[In addition,\] treatments that work on canine cancers often also work in humans](#). And that’s great news for both of us. So much of animal work in labs necessarily involves giving a creature cancer only to try to cure it. Dogs already have cancer—so any research we do on them will help their outcome, too.

Read full, original post: [Purebred dogs are helping us cure cancer](#)