

# A breakthrough drug

[Linguistics](#), [English](#)



Topic: A breakthrough drug A new drug d Everolimus has proven to cure a rare child disease known as progeria and given insights into the process of aging. Progeria is a disease, where children in teenage years die of diseases like heart failure or strokes. According to (Braconnier)“ Progeria is a rare and fatal genetic disease that affects children and causes rapid aging”. In children with progeria, the new drug called everolimus, clears out a protein with a name progerin and heals them from the illness. This protein called progerin has the problem of building up toxins in the patient’s body and hence they get aged fast and die of heart attack or stroke. A group of scientist under the supervision of NH Director Francis S. Collins reported that the drug Everolimus have the capacity to clear out the protein Progerin from theses children’s body.

Everybody’s body produces progerin a mutated form of protein lamin A, which is important for the organizing of the genome contained in the cells of the body. There is number of research which shows that progerin in the body of people accumulates as they age. The studies have also reported that, the drug Everolimus also cut back the protein progerin from the body of healthy man and also prolonged their cell life. On study with mice, Everolimus which is a derivative of immunosuppressant rapamycin, has shown to extend the life span. With a control on cycling process of protein progerin, the drug Everolimus helps in controlling the aging process. The recycling of the progerin is possible because of the ability of this drug to clear toxins from the cells of the body.

The FDA approved Everolimus on May of 2011 as a drug to fight the aging process of cell progerin . According to (Rockfeller)“ The Hutchinson-Gilford

Progeria Syndrome, also known as Progeria, is a genetic disease that affects small children and toddlers causing them to age prematurely". Eventhough this drug treat the patients from outside the underlying disease which is genetic remains. However, the drug Everolimus treats the patients and reduces 50% of chances of getting the disease again. This medicine treats 50% of the cell but still there is underlying chance of getting the disease again. Progeria is a rare disease which affects the children, and even children and adults with brain tumor and other carcinogens can be cured with Everolimus.

The diseased child has an increased amount of protein A and thus causes disruption in the working o f the cells in the body. The everolimus has got a trade name which is " Afinitor". Everolimus is orally taken as a tablet by the patients and has its share of side effects. However the side affects depends on the dosage, duration and severity of the disease. Side effects of this drug is reversible as it disappears as the medicine is stopped by the patients. Some of its side effects are nausea, poor appetite, low blood count, shortness of breath , headache and fatigue. Eventhough, this drug has so many side effects its ability to treat the patient is appreciable.

#### Work Cited

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