

What is Radiation Dermatitis?

Modern radiation therapy (RT) utilizes a series of small doses of ionizing radiation to kill cancer cells and shrink tumors. Your health care provider's goal with this therapy is to kill tumor cells after repeated radiation exposures while limiting harm to surrounding healthy cells¹. Radiation dermatitis (RD; also known as radiation-induced dermatitis or radiation-induced skin injury) is a term used to describe a spectrum of common skin reactions that are caused by RT. The stages of RD have been well-defined and progress in a predictable, radiation dose-dependent manner². As early as the first dose of RT, when the cumulative radiation dose is still low, mild reactions such as skin redness (i.e., erythema) can occur. As you receive more and more treatments, moderate reactions such as dry, flaky skin (i.e., dry desquamation) and severe reactions such as oozing skin (i.e., moist desquamation) may appear³. It is possible to have some RD symptoms occur a few weeks or months after your last treatment⁴.

As mentioned, RD symptoms and their progression (stages) are quite predictable. What is not predictable is who will exhibit symptoms of RD and who will not. Health care providers (HCPs) recognize that physiological differences in people make it difficult to predict or pinpoint those who are susceptible to RD symptoms. Your HCP will typically suggest that you keep the radiated area clean with warm water and fragrance-free soap. Your provider may also suggest prophylactic (preventative) use of products to reduce or delay the effects of RD. Consult with your health care provider to see if applying KeraStat® Cream after your first radiation dose is right for you and your radiation therapy journey.



1. Zeman E. The biological basis of radiation oncology. In: Gunderson LL, Tepper JE, Bogart JA, editors. *Clinical radiation oncology*. 4th ed. Philadelphia, PA: Elsevier, 2016.
2. Kole AJ, Kole L, Moran MS. Acute radiation dermatitis in breast cancer patients: challenges and solutions. *Breast Cancer – Targets and Therapy*. 2017;9:313-323. PMID 38503074.
3. Leventhal J, Young MR. Radiation dermatitis: recognition, prevention, and management. *Oncology*. 2017 Dec 15;31(12):885-7, 894-9. PMID 29297172.
4. Iacovelli NA, Torrente Y, Ciuffreda A, et al. Topical treatment of radiation-induced dermatitis: current issues and potential solutions. *Drugs in Context* 2020;9:2020-4-7. 2020 PMID 32587626.