Psoriasis is a systemic inflammatory skin disease. A great deal of evidence that elucidate the pathogenesis of psoriasis has accumulated in the past 30 years. Until the 1970s, psoriasis was thought to be a disease of disordered keratinocyte proliferation and differentiation, which was based on the observation of epidermal hyperplasia seen both clinically and histologically. In the 1980s, the therapeutic success of cyclosporine A, a T cell-targeted immunosuppressant agent, for psoriasis shifted the paradigm from a view of psoriasis as a disease of disordered keratinocyte proliferation and differentiation to a view of psoriasis as a T cell-mediated inflammatory skin disease. Since the mid-2000s, the focus has moved from type 1 helper T (Th1)-cells as the culprit for the disease to type 17 helper T (Th17) cells, a view that has been strengthened by the success of the therapies targeted against tumor necrosis factor (TNF)α and the Th17 pathways. Th17 cells, producing a variety of cytokines (interleukin (IL)-17 and IL-22 among others) play a role in the immunological activation that occurs in psoriasis. IL-17 functions as a potent proinflammatory cytokine and IL-22 promotes epidermal hyperplasia. IL-23, a key upstream player in the Th17 pathway, is an essential cytokine for the maintenance of Th17 cells and plays roles in multiple autoimmune processes, including psoriasis.

Even in Korea and Japan the range of therapeutic options for psoriasis has expanded. In addition to anti-TNFα agents and an anti-IL-12/23p40 agent, other novel biologic agents are during clinical trial or under investigation. Above all treatment with biologics has dramatically changed the therapeutic strategy of psoriasis. However, not every patient with psoriasis can be treated with biologics. The therapeutic guidelines instruct that treatment should be tailored to meet individual patients’ needs. In this lecture, we give an overview of the emerging therapies in psoriasis based on the pathogenesis.
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Education and experiences:

1993-1999 Medical Student: Tokai University School of Medicine, Kanagawa, Japan
1999-2001 Resident: Tokai University Hospital, Kanagawa, Japan
2001-2005 Postgraduate Student: Postgraduate School of Internal Medicine (Dermatology), Tokai University School of Medicine, Kanagawa, Japan
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Awards:

2008 The best paper of the year of the Tokai Journal of Experimental and Clinical Medicine
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