

Speech by

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It is indeed my great honor to be awarded this very prestigious honor, the King Faisal International Prize in Medicine. A Japanese newspaper reported that this Prize is so called “a Nobel Prize in the Arab world”.

I am very much pleased and I appreciate that my life work on IL-6 is evaluated and chosen for this highly prestigious award.

We have discovered this molecule, now called IL-6, as a B cell differentiation factor which induces antibody production in 1970. However, when we isolated this molecule in 1986, we noticed that this molecule has a wide variety of biological functions and particularly very strong activity to induce chronic inflammation. Then, we discovered over-production of IL-6 in various inflammatory diseases, such as rheumatoid arthritis, Castleman’s disease, juvenile idiopathic arthritis, Still’s disease, giant cell arteritis, progressive sclerosis, cytokine storm and so on.

After complete elucidation of IL-6 receptor system, and signal transduction from membrane to gene expression, we challenged to treat patients who showed overproduction of IL-6 and strong inflammatory symptoms, such as rheumatoid arthritis, by preparing the antibody against IL-6 receptor system to block the IL-6 signal transduction.

Eventually, this antibody, now called Tocilizumab, showed a dramatic therapeutic effect on various inflammatory diseases including rheumatoid arthritis. Now, this antibody is used in more than

100 countries and rescued nearly a million patients all over the world. As this antibody can prevent bone absorption and joint destruction in rheumatoid patients, no wheel chair will be required in any rheumatoid patients, in 10 years.

I am very glad that our very basic study comes into useful application in medicine and rescue many patients in the world.

Again, I would like to express my sincere appreciation to the King of Saudi Arabia and members of the Board of the King Faisal International Prize.

Thank you very much.