

The one thing I do want to mention to you is that because T3 is-- T4 is a great drug to start. Understand T4 Levothyroxine and giving that-- what that's offering is a pool of T4 that's available for the production of T3. T3-- reminder, T3, over 60%, comes from T4. In very unique signaling that allows in the pituitary and the rest of the body tissues T4 will convert to T3 and it's under the-- a lot of biofeedback with some enzymatic pathways, enzymatic pathways that are very important in activating this metabolically potent hormone, T3, either activating it, get more and more active, or actually inactivating it.

So it is good to have T4 there, you need T4 to help get the T3, but for some people, there is a block between T4 to T3 conversion. And that pathways would block for a number of reasons-- there's polymorphisms, we've identified two in the D1 enzymatic path-- D2 enzymatic pathway that can cause that. But there's other things too, we haven't identified. But for some reason T4 might be abundant, T3 not so much and certainly not in tissue levels. And so we have to certainly not go beyond six months without symptom relief even though you have good lab data we need to be thinking of adding T3. In whatever format, whether it be synthetic or, and something to consider, coming back now is desiccated thyroid extract.