substantiate claims that the combination is superior to one of the agents used separately. These combinations are expensive, deny the physician flexibility in dosage, are primarily promotional devices, and have the inherent problem that the patient undergoes the risk of serious adverse reaction to two or more drugs rather than to a single defined agent. The physician cannot determine which component is causing trouble if a bad reaction is encountered. I personally believe that we would do much better without these preparations.

Then, as you know, the National Academy of Sciences under the Kefauver Act of 1962 has under review all of the drugs manufactured prior to then, and they have been making recommendations on various combination drugs that have been in the marketplace for a long time suggesting their—recommending their removal.

On Panalba, which is a combination of tetracycline, phosphate complex, and novobiocin sodium, evaluation "ineffective as a fixed combination," and then some "comments from the panel report. It does not seem rational to expose a patient to the hazards of two drugs when the beneficial effects are no greater than those resulting from the use of one. Again, it has not been shown each active ingredient makes a contribution to the effect of the combination claimed."

I am not reading the whole statement. The last sentences are:

A large number of papers purporting to demonstrate clinical efficacy of this combination were reviewed. No control studies were located and most consisted of reports of a few patients treated, with variable results. It is the considered judgment of the panel that this combination has no place in rational therapeutics and should not be marketed.

This particular drug is among the top 200 most prescribed drugs. I think the National Academy of Sciences as of now has recommended removal of six of these combinations and is continuing its studies.

Do you have any comment from your experience or studies to make on the question of the developing, expanding production of combination drugs?

Dr. MOSER. Well, Senator, I guess the only thing that ever started the use of combination drugs was the simplicity of delivery where the patient takes one pill instead of two. But I am familiar with Dr. Kunin's statement, and I think this is reflected throughout the profession. You immediately hamstring yourself when you put two drugs in a fixed dosage together, and it is just not widely done in hospitals where I have been. I don't recall having used a drug combination in the last 5 years.

Senator NELSON. Does your formulary carry any fixed combinations?

Dr. MOSER. It carries one, to my knowledge. This is a combination of triameterene and hydrochlorothiazide.

Senator NELSON. You don't prescribe them yourself?

Dr. MOSER. No, I don't; because I like to adjust my doses, and I am not permitted by the fixed combination. And I think most physicians feel the same way. One prefers the elasticity that comes with being able to adjust dosages. Also, they are more expensive.

Senator NELSON. You mentioned a few moments ago what you considered an adequate source of information for physicians in prescribing drugs including the Medical Letter and some text and other sources. If the National Academy of Sciences is correct, and if your judgment about the use of them in your own practice is correct, on what basis do you suppose these drugs are so widely prescribed?