Core Hypothetical

Through a growing use of farm animals, live tissue transplantation has burgeoned. Pigs now provide arteries, heart valves, connective tissues and even have been suggested as liver donors to humans. Providing swine for medical use is highly profitable. Several companies dominate the marketplace. In the US, Natural Operative Bioscience Systems ("NOBS") predominates (New York Corporation).

Traditionally, raising swine has been and remains almost exclusively for providing human food. Numerous cultures around the world raise pigs and harvest millions of tons of pork products annually. Pigs eat nearly everything consumable. The key to the profitable raising of these animals lies in the conversion of feed into animal weight gain. More precisely, the conversion rate and length of time from starting to end the process of fattening up a pig dictates whether there will be a profit.

Many companies specialize in providing feed formulas and animal health products for pork producers. One of the international leaders is a German firm which began as a part of a social consciousness directive from the German government back in the 1970's. The business, Specialitat Welt Industrie fur Neuerung Ernahrungs, AG [Specialty World Industry for Innovative Nutrition] ("SWINE")(German Coporation) was funded by the German government in an effort to end world hunger. They remain a minority owner of SWINE. The majority owner of swine is America's largest agribusiness enterprise, Producer's Investment Group ("PIG") (Minnesota Corporation).

PIG is a huge company which raises hogs, contracts with others to raise hogs, produces feed stocks, processes fished animals, ships, markets finished products etc. in every aspect of the pork industry. PIG also relies heavily on SWINE for nutritional advice, feed formulations, genetic and breeding services,

phamacogenomics, and nutritional supplements. PIG is also is in the business of selling live pigs and harvested products to NOBS for medical uses.

Another major animal nutrition company is Hormone Augmented Weight Gain Services ("HAWGS")(Delaware Corporation). HAWGS is wholly owned by a fortune 100 conglomerate. HAWGS is a very small contributor to the income line of its parents' balance sheet. For its part, HAWGS has annual sales in the millions of dollars and thereby can claim it influences the means by which countless millions of pigs are raised on an annual basis. Its sole role in the industry is to recommend and create feed formulas and supplements for its customers who raise pigs. At one time, HAWGS brokered the sale of pig implantable tissues, including sales to NOBS. The role of HAWGS in the formulary and supplements aspect of the industry is similar to SWINE, but each has its own proprietary approach.

Thus the parties are many of the major players in every aspect of raising animals for every purpose to which the animals can be used. They have however become embroiled in an unintended consequence of optimizing the conversion rate to weight gain. For a considerable period of time, the efforts at increasing production efficiency (and profit) have resulted in subtle yet serious impairments to the pigs' cardiovascular system.

As the story goes, typical weight gain for a pig is on average 1 ½ -2 pounds per day. This makes the typical time to market weight (250-300 pounds) about 6 months. Through highly specialized breeding, genetics, phamacogenomics, hormones and nutrition, SWINE has developed a means to get pigs growing at 3 pounds per day. PIGS had been requesting that SWINE reach this goal for years. Since the goal has been met, PIG has had substantial profits which it has been sharing with SWINE. Neither SWINE nor PIG has disclosed to the public exactly how this goal has been achieved.

The Problem

These super pigs, by reason of their rapid growth experience their own serious cardiovascular problems. The rapid growth impacts their blood vessels leaving the pigs with sloppy arteries. They don't do well in holding their shape, have frequent aneurisms, and generally are prone to filling like a balloon rather than acting as a conduit for blood flow.

These pigs also have problems with their heart valves, especially the mitral valve. It can sometimes behave like the arteries, losing some shape. This will happen with some rate of leakage and ultimate failure.

The heart valves and arteries are of course the most valuable parts of the pig and are most frequently used in transplants with humans. The actual failure rate of these parts in the pigs was never really considered until after the transplanted parts failed in humans.

PIG never considered the impact of its increased efficiency in the conversion rate of feed to weight gain as anything but an improvement. It was beyond anyone's thinking that there would be negative consequences for some other aspect of their business. To their defense, most of the animals are processed long before these problems show up. Premature death among these pigs is not uncommon as they are to anyone's understanding not as 'robust' as a pig that is left in its natural state. There is knowledge of a higher than usual mortality rate among the super pigs, but without any serious investigation as to cause.

NOBS was never informed of any changes in the 'raw material.' Once harvested, the arteries and heart valves look identical to any other similar parts. The other tissues, i.e. connective tissues remain unaffected by the non conventional growing practices.

SWINE theorized a problem could result in the super pigs if they were kept around long enough. Their goal always was to achieve market weight as fast as possible. In addition, fighting world hunger has been the priority for SWINE. These pigs, by growing faster and using less feed to do so are only positive. The goal of eradicating world hunger was met by the work of SWINE in developing the super pigs. The theoretical consequences to the cardiovascular systems were discussed but not disclosed to anyone.

HAWGS also improved its conversion rates for pigs through its formulations and products, but on a lesser scale than SWINE. It is to be noted that HAWGS also was a supplier at one time to NOBS. HAWGS is always studying animal health. They have data from producers which they obtained to 'spy' on SWINE. HAWGS never looked at the data closely or they would have been able to recognize the likely consequences of intensive growth on the pigs' cardiovascular system.

The supplies of harvested pig parts used in human transplants are well documented once they leave NOBS. The surgeons, hospitals, etc. get complete documentation from the time the products are shipped by NOBS. They can learn the time of harvesting, but not, for example the age or location where the pig was raised, etc. As far as the users are concerned the products come from NOBS. NOBS only keeps track by date and quantity what parts it gets.

The Result

Thousands of people have been transplanted with mitral valves supplied by NOBS.

Tens of thousands have been transplanted with arteries supplied by NOBS.

Over the past few years a significant increase has been observed in mitral valve failure, clotting, aneurisms, thromboses, etc. in people who have received donor material from pigs. No definitive causal link has been established with any specific source of these products. Knowledgeable plaintiffs' lawyers have been meeting with the intent to commence litigation. It is probable that a causation will be established at some point.

Potential damages include: death, stroke with and without significant brain damage and/or permanent physical impairment, initial surgical costs, replacement surgical costs, fear of death, fear of stroke, heart attack, circulatory disorders resulting in impairment and/or amputation, and other related conditions.

Resulting litigation will go beyond NOBS, the immediate supplier to other suppliers and eventually all of the parties named herein. In addition, hospitals, surgeons, and numerous others are expected to be included in lawsuits.

Issues abound concerning jurisdiction, venue, and joinder. Numerous state and federal law questions permeate the situation. Your assignment will be as attorney for one of the parties. You must represent them as would private counsel. You

must abide by the MN Rules Prof. Conduct. You may discuss your positions and strategy with other counsel for the same client, i.e. co-counsel in another group representing the same client. No one in any group may violate a client confidence or secret in making such disclosures to anyone representing a different party in any group. If you have any doubts, speak to the instructor before discussing anything with anyone.