



UNIVERSITY OF MINNESOTA
TWIN CITIES

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staff memo

August 19, 1974

MEMORANDUM

TO: R. Prineas
R. Crow

FROM: Henry Blackburn

RE: VPB and Sudden Death

In regard to the Cardiodynamics letter, I suggest that you continue to discuss, and keep me and the other academic staff apprised of, what we might pursue in this area. In my view, the ectopic beat question is worth answering in ambulatory coronary patients. I doubt others can do it better than we, if we have access to the AMIS population and some technical support from Hansman or elsewhere.

I think the sooner we formulate the questions the better. The first step is one we should have done long ago, i.e., make the best possible estimates of the frequency of various degrees of arrhythmia, and of the event rate in each class and then make sample size estimates based on these estimates and assumptions. I do not propose the values below as highly realistic ones, only as a model which we should develop more thoroughly and soon. We might want to pose our model for the criticism of the Sudden Death conference.

Shortly after the conference we will know whether we have the AMIS ECG Center and can then apply for a major grant to elucidate the question.

Meanwhile, I feel that we are not pursuing this adequately if we remain unaware of the HIP Study progress utilizing one-hour monitoring and again I encourage you to arrange a visit to them, on our current Sudden Death grant. If they are several years ahead of us and have a good chance of answering the important questions, we should continue to concentrate on the Trial aspects of VPB suppression and not get deeply into the Natural History ones about VPB and future risk; perhaps you can persuade me to the contrary.

pc: Academic staff

Mean Frequency of VPB in 10 hours Monitoring
or on Induction Test

	<u>Prevalence Rate of VPB</u>	<u>Relative Risk</u>	<u>Five-year P of Sudden Death</u>	<u>Treatment Effect in Controlled Trial</u>
1) No VPB	.50	1.0	.10	—
2) Any Simple Unifocal VPB	.50	1.5	.15	.50
3) "Multiple" Unifocal VPB	.10	2.0	.20	.50
4) Multifocal VPB	.05	2.5	.25	.50
5) VPB Pairs	.02	2.5	.25	.25
6) VPB Runs	.01	4.0	.40	.25
7) Early cycle VPB	.005	5.0	.50	.25
8) Any complex forms (5-7)	.025	3.0	.30	.25