Name: Joachim Boos Response: individual Publication option 1

Comments:

Knowing that a couple of aspects will be discussed by different organizations my comment will focus specifically on the interpretation of "direct benefit" addressed in 10.1.

This chapter presents an argumentation leading to a statement in Line 937-8 : "That is why a randomized controlled trial, even when the control is a placebo, may be regarded to have a prospect of direct benefit for the minor concerned."

I clearly disagree with this argumentation:

Premise 1 (928-30): "A controlled trial should be based on equipoise ...... Is genuine uncertainty in the expert medical community about the most beneficial treatment" Agreed.

Premise 2 (930-933): "As a consequence., it is unknown in which of the arms ..... participants will experience the highest net benefit.....)

Agreed.

Premise 3 (933-934):"....all participants have an equal chance to be allocated to either arm."

Agreed.

Premise 4 (934-936):" .....all participants have an equal chance to experience the highest net benefit". Agreed but this premise is incomplete!

These premises lead to the argument presented in lines 937-8 that "randomized controlled trial,..., may be regarded to have a prospect of direct benefit..." Disagreed:

Premise 4 is incomplete and misleading:

In the mentioned setting all patients in addition do have the same chance to be in the less effective arm. Ex ante, the prospect for direct benefit is the same as for no benefit. In a two-sided randomized trial under the condition of equipoise even every minor not participating has the same (50:50) chance to get the better treatment. In addition, trials may end with superiority of the innovative intervention, with its equality or even inferiority. Unbiased trials are open minded and the evaluation of the prospect of individual benefit has to take that into account.

In the case of equality, no individual benefit rises from trial participation.

In the case of inferiority of the innovative intervention the standard treatment will prove being better. For participants the chance to be in the superior arm then was 50% while patients refusing the participation were to 100% in the net-beneficial situation.

The case of inferiority of the hypothetical intervention, trial participants of this arm will receive a treatment worse than standard of care.

In this case, a prospect of net-maleficence for trial participants has to be taken into account. Minors could easily avoid that by non-participation!

In the context of controlled randomized trials these additional aspects of "Premise 4" have to be taken into account and the prospect of net-benefit (randomization in the superior arm) has to be balanced by the net-maleficence (randomization in an arm less active than standard). In trials under the condition of equipoise, the ex-ante probability is equal.

The only remaining situation for a prospect of net-benefit can be constructed if the control arm may be superior to health care standard. Then in both arms a net benefit may be assumed. Such trials however lead to very different ethical levels of discussion which cannot be outlined here. These thoughts are explicitly true for the therapeutic confirmatory trials mentioned line 939. They "are best known examples", however for the category "benefit for the group of patients" – as outlined. Patients asked for participation are normally beneficiary of precursory trials.

In summary:

Randomized trials comparing innovations with therapeutic standards on the basis of equipoise offer the prospect of net benefit, equity or net maleficence.

In addition, they expose minors to risk and burden categories. Therefore they in general cannot be classified in the category individual benefit. They do offer a direct benefit for the group of patients as at the end of the trial uncertainty will become certainty.

The Ethical Considerations should avoid a general classification of RCT under the category individual benefit. This may lead to categorical decisions and reduced reflection on risk-benefit-burden balances. It may even include a prospect of misuse.

The situation is much more complex and if a RCT claims for the category "direct benefit", by this intends to expose the minors to "more than minimal risk and burden" this explicitly needs to be exemplified in detail.

Literature: (Discussion of benefit categories in the context of therapeutic trials in paediatric oncology)

Boos J: Wie nutzen Therapieoptimierungsstudien? Eine Analyse des Nutzenbegriffes im Kontext pädiatrischer Versorgungsforschung. Buchtitel: Ethik und Ökonomie in der Medizin, Hrsg. Von Eiff W, S. 303-358, Medhochzwei Verlag, 978-3-86216-117-1, 2014

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