Preliminary Report: The Geriatric Propamed Study: “Prospective Pharmacogenetic and Medication Analysis Study in Geriatrics”

Poster 138a

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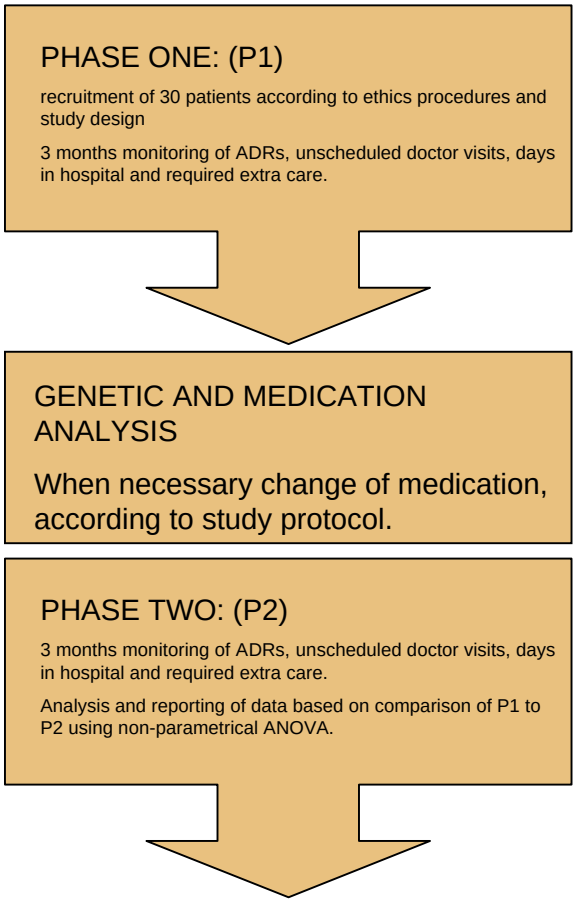
Abstract:

In a worldwide first prospective pharmacogenetic study thirty patients in a geriatric facility were carefully monitored by the care staff using a specially developed computer programme to record possible ADRs, required visits from doctors, extra care and days required in hospital for a period of three months. During this time medication was also carefully monitored and recorded. At the end of phase1 patients were non-invasively genotyped for clinically relevant cytochrome P450 differences and subjected to an intensive medication interaction analysis using the awenydd proprietary medication analysis databank and programme Vidalbase. Using the results of this combined analysis patients medication therapy was adopted – here after we referred to as Phase2 - to their individual cytochrome genetics, taking into consideration the results from the medication interaction analysis.
Herewith we report a preliminary result based upon the analysis of the complete phase 1 data and the halfway point in the phase2 data. There is at this point of the analysis an increase in the patients quality of life (QoL) as determined by a SF-36 Questionnaire performed at the halfway point in phase1 compared to the same Questionnaire performed at the halfway point in phase2. There has been a significant reduction in the number of reported possible ADRs and in the accumulated days required in hospital. There is also reduction in the number of required doctors visits and extra care. A pharmaco-economic analysis, although statistically unsupported at this stage, has also shown a reduction in cost when comparing the two phases of the study.
We herby tentatively conclude that pharmacogenetic testing combined with monitoring and intensive medication interaction analysis can improve the QoL and lead to cost reduction in a geriatric facility.



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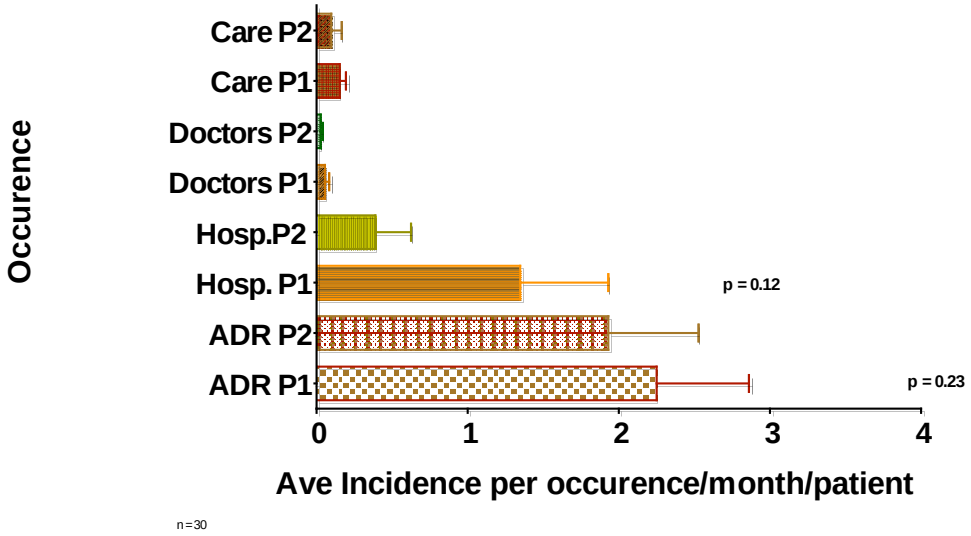
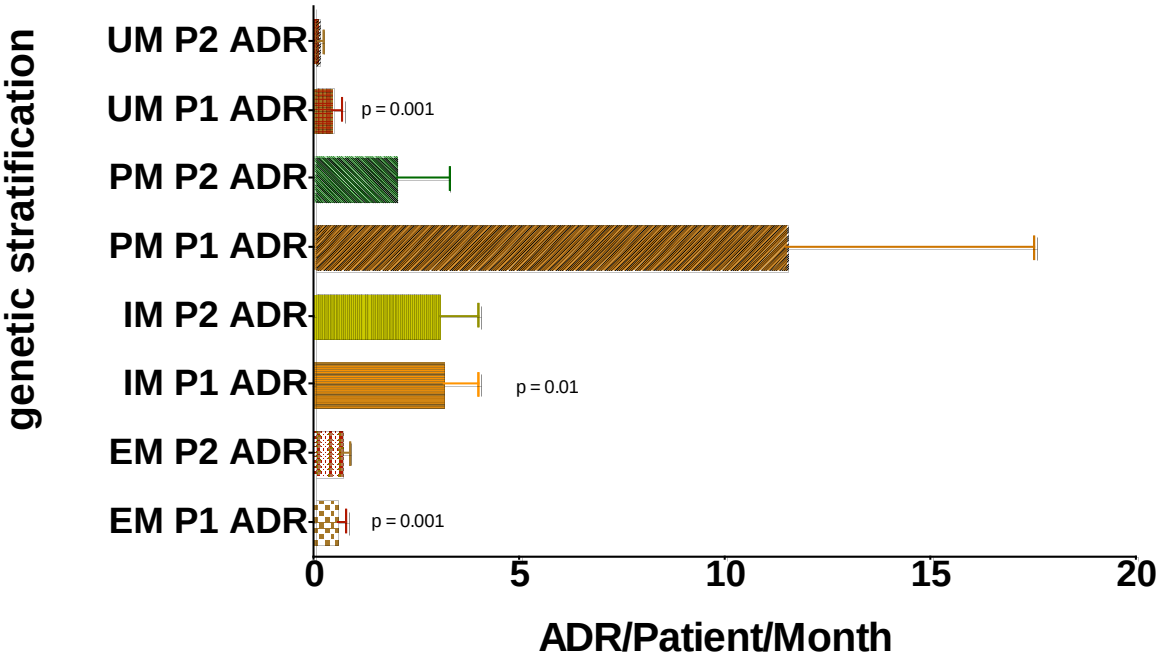
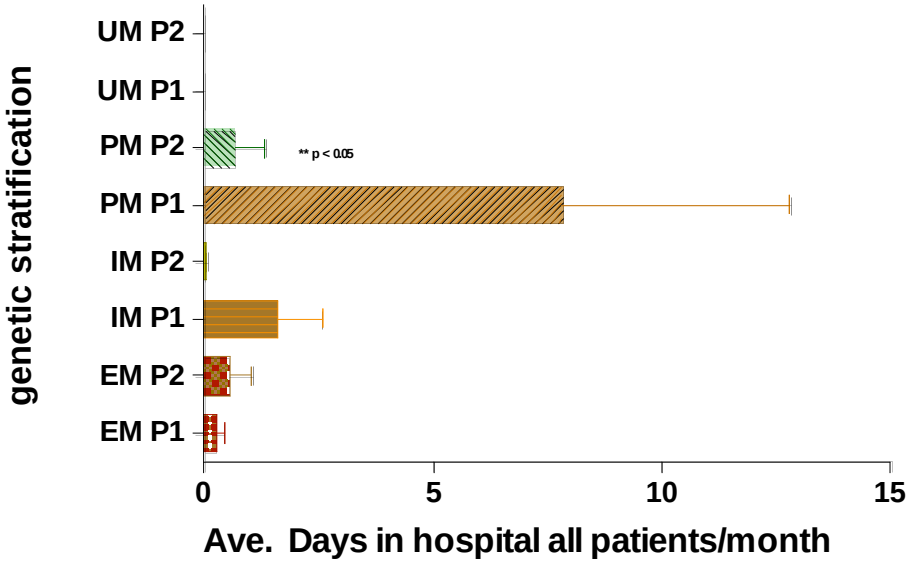
Genetic and medication analysis reduces the incidence
of hospitalisation days, doctor visits, extra care and adverse drug reactions.



Poor metabolisers have significantly more ADRs than other genetic classes.

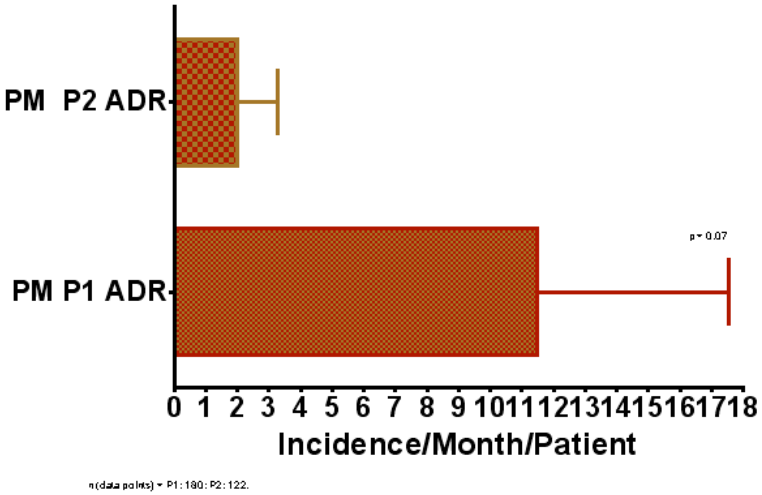


Genotyping/Medication analysis reduces hospital stays for PMs significantly.

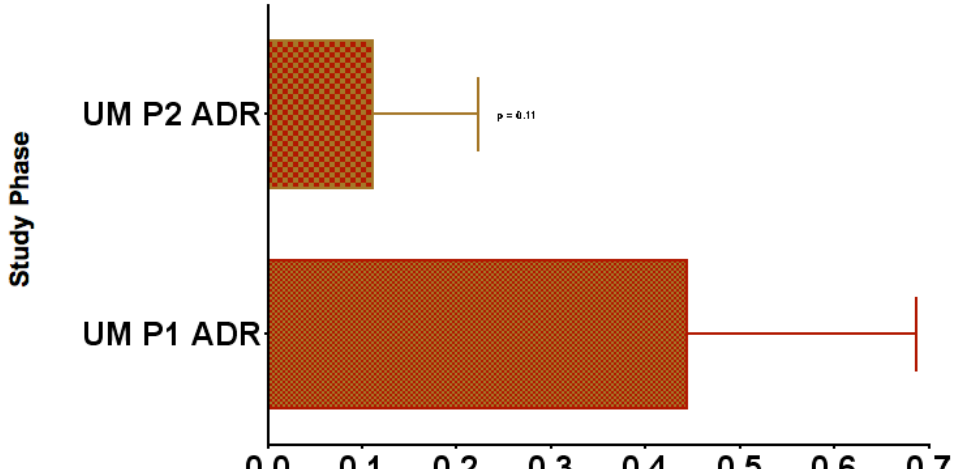


Extreme Metabolisers benefit from genetic and medication analysis.

There is a large reduction in the number of ADRs in the poor metaboliser group after genetic testing and medication analysis.

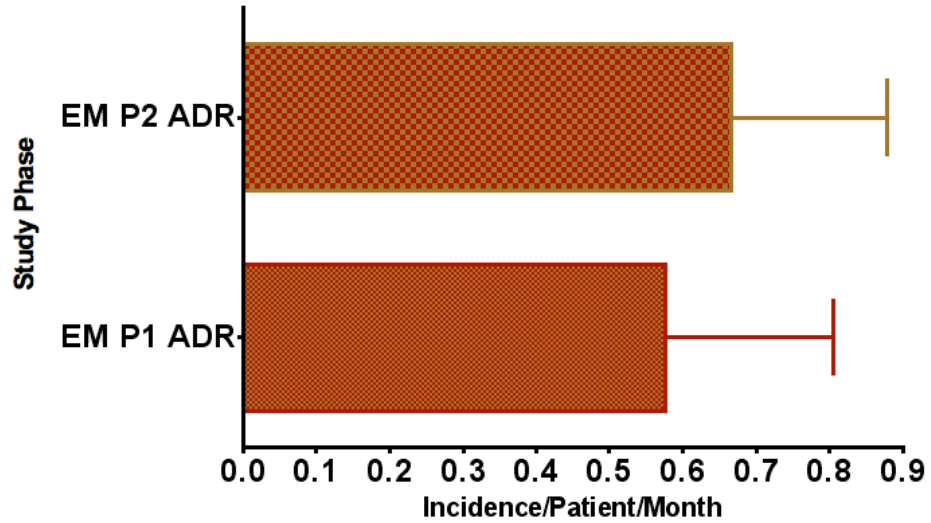


There is a large reduction in the number of ADRs in the fast metaboliser group after genetic testing and medication analysis.



Normal and intermediate metabolisers benefit little.

There is no difference in the number of ADRs in the normal metaboliser group after genetic testing and medication analysis.



n (data points) = P1: 180 P2: 122

There is no difference in the number of ADRs in the intermediate metaboliser group after genetic testing and medication analysis.