Thank You

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Table 1

Warfarin dose	
Median	32.5 mg/week
Interquartile range	24.0–42.5 mg/week
VKORC1 genotype	
G/G	38 (37)
A/G	46 (44)
A/A	16 (15)
NA	4 (4)
CYP2C9 genotype	
*1/*1	61 (59)
*1/*2	17 (16)
*3/*18	10 (10)
*2/*2	4 (4)
*1/*6	2 (2)
*1/*11	2 (2)
*1/*12	2 (2)
*6/*7	1 (1)
*1/*9	1 (1)
*2/*12	1 (1)
*3/*12/*18	1 (1)
NA	2 (2)
CYP4F2 genotype	
C/C	55 (53)
T/C	40 (38)
T/T	6 (6)
NA	3 (3)
Age	
Mean, median	64 years, 67 years
Interquartile range	53–75.3 years
Height	
Mean, median	172 cm, 173 cm
Interquartile range	163–180 cm
Weight	
Mean, median	81 kg, 78.8 kg
Interquartile range	64.9–90.7 kg
Race	
White	78 (75)
Asian	18 (17)
Black	8 (8)
Sex	
Male	60 (58)
Female	44 (42)
Inducers use	
Number (percent)	1 (1)
Amiodarone use	
Number (percent)	5 (5)

Inducers included carbamazepine, rifampin, and phenytoin.

Extending and evaluating a warfarin dosing algorithm that includes CYP4F2 and pooled rare variants of CYP2C9.
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Pharmacogenetics and Genomics. 20(7):407-413, July 2010.
DOI: 10.1097/FPC.0b013e328338bac2

Table 1 Characteristics of the patient population (N=104) Inducers included carbamazepine, rifampin, and phenytoin.

Fig. 1

(a)

Model	Pharmacogenetic	Clinical	Fixed
Mean AE (mg/week)	8.1 ± 0.9	10.4 ± 1.0	12.2 ± 1.0
Adjusted R^2 (%)	46	19	NA
Within 1 mg/day of actual dose (%)	63	54	38
> 1 mg/day over actual dose (%)	13	14	34
> 1 mg/day under actual dose (%)	23	32	29

(b)

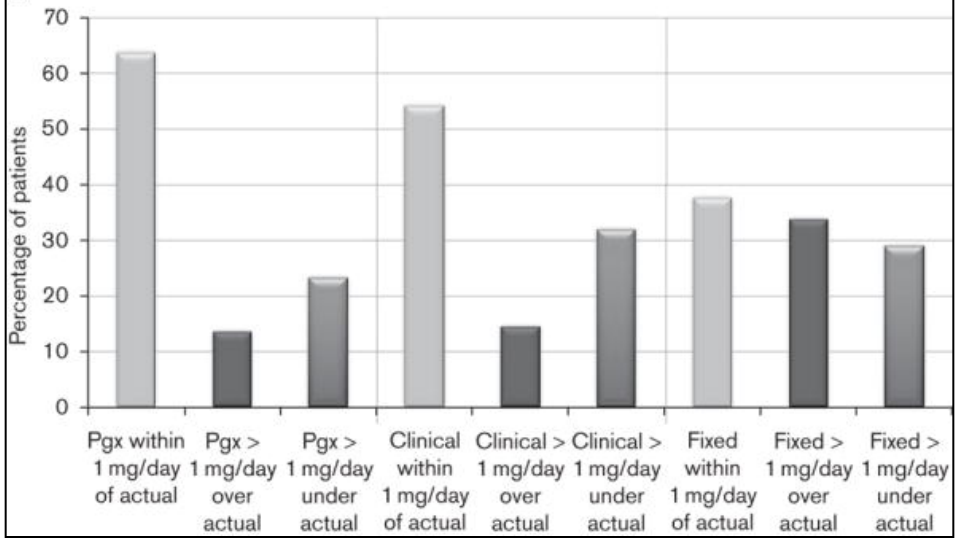

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Fig. 1 (a) Performance of the three different dosing models: pharmacogenetic, clinical, and fixed. Includes all patients who reached stable dose (N=104). (b) Percentage of patients who were either within 1 mg/day of the actual dose, more than 1 mg/day over the actual dose, or more than 1 mg/day under the actual dose for the three different dosing models: pharmacogenetic, clinical, and fixed.

Table 2

CYP2C9 SNP	Number	Average dose ± SE
*12 C/C	87	36.3 ± 1.7
*12 T/C	4	19.6 ± 2.6
*12 NA	13	34.1 ± 5.1
*18 A/A	87	36.5 ± 1.7
*18 T/A	11	27.2 ± 3.3
*18 NA	6	35.3 ± 8.1
CYP2C9 regression	Adjusted R^2	*P* value
*12	3.9%	0.034
*18	2.5%	0.064

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Table 2 Analysis of rare CYP2C9 variants. Analysis of the *12 and *18 alleles alone SNP, single nucleotide polymorphism.

Table 3

CYP2C9 (*6–*18)	Number	Average dose ± SE	Comparison	Value
Homozygous WT at all SNPs	82	37.6 ± 1.8	*P* value	0.0065
Heterozygous at any	20	27.0 ± 2.1	Adjusted R^2	6%

SNP, single nucleotide polymorphism; WT, wild-type.

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Table 3 Comparison of individuals who were either wild-type for *6, *7, *9, *11, *12, and *18, or had a variant genotype at any of these alleles SNP, single nucleotide polymorphism; WT, wild-type.

Table 4

CYP2C9 (*2–*3)	Number	Average dose ± SE	Comparison	Value
Homozygous WT at all SNPs	69	38.6 ± 2.1	*P* value	0.0034
Heterozygous at any	33	28.9 ± 1.7	Adjusted R^2	7%

SNP, single nucleotide polymorphism; WT, wild-type.

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Table 4 Comparison of individuals who were either wild-type for *2 and *3, or had a variant genotype at either *2 or *3 SNP, single nucleotide polymorphism; WT, wild-type.

Table 5

CYP2C9 (*2–*18)	Number	Average dose ± SE	Comparison	Value
Homozygous WT at all SNPs	61	40.2 ± 2.2	*P* value	0.00018
Heterozygous at any	41	28.5 ± 1.5	Adjusted R^2	12%

SNP, single nucleotide polymorphism; WT, wild-type.

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Table 5 Comparison of individuals who were either wild-type for *2, *3, *6, *7, *9, *11, *12, and *18, or had a variant genotype at any of these alleles SNP, single nucleotide polymorphism; WT, wild-type.

Table 6

Model	MAE ± SE (mg/week)	Adjusted R^2 (%)
IWPC Pgx. (2009) [29]	7.80 ± 0.84	50
IWPC clinical (2009) [29]	10.14 ± 1.04	22
Gage *et al.* [23]	7.79 ± 0.83	49
Sconce *et al.* [25]	8.98 ± 0.94	47
Zhu *et al.* [28]	8.98 ± 0.95	39
Tham *et al.* [26]	9.72 ± 0.95	33
Herman *et al.* [24]	9.73 ± 0.89	47
Wu *et al.* [27]	9.98 ± 0.95	35

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Table 6 Comparison of model performance This analysis was restricted to the 95 patients who had all the variables necessary for the eight different dosing equations.IWPC, International Warfarin Pharmacogenetics Consortium; MAE, mean absolute error.