

Metadata and Annotation Schema for PharmML

DDMoRe Implementation: 0.5.0

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ps:model-has-publication-source-external-id

label: source id.

Comment: link between a model and a publication identifier for a source of the model

Domain: pmlo:PHARMML_0000001 .

Range: rdfs:Literal .

ps:model-has-name

label: name of model.

Comment: link between a model and the name of this model; when automatically input per the model's PharmML source, the (string) value of ct:Name

Domain: pmlo:PHARMML_0000001 .

Range: rdfs:Literal .

ps:model-has-author

label: author of model.

Comment: link between a model and the name (string) of the author of the PharmML file for the model

Domain: pmlo:PharmMLO_0000001 .

Range: rdfs:Literal .

ps:model-has-description

label: description of model.

Comment: link between a model and the description of this model; when automatically input per the model's PharmML source, the (string) value of ct:Description

Domain: pmlo:PharmMLO_0000001 .

Range: rdfs:Literal .

28 ps:model-has-description-short

29 label: short description of model.

30 Comment: link between a model and a description of this model; this description provides
31 an account of the key features of the final model in the modeller's words

32 Domain: pmlo:PharmMLO_0000001 .

33 Range: rdfs:Literal .

34 ps:model-has-description-long

35 label: long description of model.

36 Comment: link between a model and a description of this model; this description includes
37 detailed discussions or material

38 Domain: pmlo:PharmMLO_0000001 .

39 Range: rdfs:Literal .

40 wat:model-origin-of-code-in-literature-controlled

41 label: model derived only from literature.

42 Comment:

43 Domain: pmlo:PharmMLO_0000001 .

44 Range: rdfs:Literal .

45 wat:model-implementation-conforms-to-literature-controlled

46 label: model implements literature.

47 Comment:

48 Domain: pmlo:PharmMLO_0000001 .

49 Range: rdfs:Literal .

50 wat:model-implementation-source-discrepancies-freetext

51 label: description of discrepancies between source and implementation.

52 Comment:

53 Domain: pmlo:PharmMLO_0000001 .

54 Range: rdfs:Literal .

55 ps:model-modelling-question

56 label: modelling question.

57 Comment: link between a model and a specific, possibly complex topic describing the
58 specific question the model intends to address

59 Domain: pmlo:PharmMLO_0000001 .

60 Range: rdfs:Resource .

61 **ps:model-research-stage**

62 label: nature of research.

63 Comment: link between a model and a type of research and/or development context in
64 which the model has been produced.

65 Domain: pmlo:PharmMLO_0000001 .

66 Range: rdfs:Resource .

67 **ps:model-field-purpose**

68 label: therapeutic area.

69 Comment: link between a model and a specific area of application for the model

70 Domain: pmlo:PharmMLO_0000001 .

71 Range: rdfs:Resource .

72 **ps:model-related-to-disease-or-condition**

73 label: has disease or indications.

74 Comment:

75 Domain: pmlo:PharmMLO_0000001 .

76 Range: rdfs:Resource .

77 **ps:model-tasks-in-scope**

78 label: tasks in scope.

79 Comment: link between a model and its relevant modelling tasks.

80 Domain: pmlo:PharmMLO_0000001 .

81 Range: rdfs:Resource .

82 **ps:model-type-of-data-source**

83 label: data source type.

84 Comment: link between a data set and a generic type of data source

85 Domain: pmlo:PharmMLO_0000001 .

86 Range: rdfs:Resource .

87 **ps:trialdesign-HasAssociatedDataOfType-DataPool**

88 label: .

89 Comment: A property links the trial design part of a model to a designated type of data
90 source.

91 Domain: pmlo:PharmMLO_0000006 .

92 Range: rdfs:Resource .

93 **ps:model-HasAssociatedDataOfType-DataPool**

94 label: .

95 Comment: A property links the model to the designated type of data source to which is
96 linked its data design part.

97 Domain: pmlo:PharmMLO_0000001 .

98 Range: rdfs:Resource .

99 **ps:trialdesign-HasAssociatedOrganismType-DataPool**

100 label: .

101 Comment: A property links the trial design part of a model to designated species of
102 animals to which the data relates.

103 Domain: pmlo:PharmMLO_0000006 .

104 Range: rdfs:Literal .

105 **ps:trialdesign-HasAssociatedOrganismType-DataPool-freetext**

106 label: .

107 Comment: A property links the trial design part of a model to designated species of
108 animals to which the data relates as a freetext entry.

109 Domain: pmlo:PharmMLO_0000006 .

110 Range: rdfs:Literal .

111 **ps:model-HasAssociatedOrganismType-DataPool**

112 label: .

113 Comment:

114 Domain: pmlo:PharmMLO_0000001 .

115 Range: rdfs:Resource .

116 **ps:model-HasAssociatedOrganismType-DataPool-freetext**

117 label: .

118 Comment:

119 Domain: pmlo:PharmMLO_0000001 .

120 Range: rdfs:Literal .

121 **ps:trialdesign-HasAssociatedHumanGroupByMedicalStatus-DataPool**

122 label: .

123 Comment: A property links the trial design part of a model to designated medical type

124 of human to which the data relates.

125 Domain: pmlo:PharmMLO_0000006 .

126 Range: rdfs:Resource .

127 **ps:model-HasAssociatedHumanGroupByMedicalStatus-DataPool**

128 label: .

129 Comment:

130 Domain: pmlo:PharmMLO_0000001 .

131 Range: rdfs:Resource .

132 **ps:modellingstep-modelrun-uses-software**

133 label: software used to run model.

134 Comment:

135 Domain: pmlo:PharmMLO_0000007 .

136 Range: rdfs:Resource .

137 **ps:model-modelrun-uses-software**

138 label: software used to run model.

139 Comment:

140 Domain: pmlo:PharmMLO_0000001 .

141 Range: rdfs:Resource .

142 **ps:modellingstep-modelrun-uses-software-freetext**

143 label: software used to run model – freetext variant.

144 Comment:

145 Domain: pmlo:PharmMLO_0000007 .

146 Range: rdfs:Literal .

147 **ps:model-modelrun-uses-software-freetext**

148 label: software used to run model – freetext variant.

149 Comment:

150 Domain: pmlo:PharmMLO_0000001 .

151 Range: rdfs:Literal .

152 ps:model-HasAssumptions-freetext

153 label: model assumptions.

154 Comment: A property allowing to record textual descriptions of modelling assumptions
155 made.

156 Domain: pmlo:PharmMLO_0000001 .

157 Range: rdfs:Literal .

158 ps:trialdesign-HasAssociatedRouteOfAdministration-datapool

159 label: route of administration.

160 Comment:

161 Domain: pmlo:PharmMLO_0000006 .

162 Range: rdfs:Resource .

163 ps:model-HasAssociatedRouteOfAdministration-datapool

164 label: route of administration.

165 Comment:

166 Domain: pmlo:PharmMLO_0000001 .

167 Range: rdfs:Resource .

168 ps:trialdesign-HasAssociatedRouteOfAdministration-datapool-freetext

169 label: route of administration.

170 Comment:

171 Domain: pmlo:PharmMLO_0000006 .

172 Range: rdfs:Literal .

173 ps:model-HasAssociatedRouteOfAdministration-datapool-freetext

174 label: route of administration.

175 Comment:

176 Domain: pmlo:PharmMLO_0000001 .

177 Range: rdfs:Literal .

178 ps:trialdesign-HasAssociatedDoseRegimen-DataPool

179 label: dose regimen.

180 Comment:

181 Domain: pmlo:PharmMLO_0000006 .

182 Range: rdfs:Resource .

183 ps:model-HasAssociatedDoseRegimen-DataPool

184 label: dose regimen.
185 Comment:
186 Domain: pmlo:PharmMLO_0000001 .
187 Range: rdfs:Resource .

188 ps:trialdesign-HasAssociatedDoseAmount-DataPool

189 label: dose regimen.
190 Comment:
191 Domain: pmlo:PharmMLO_0000006 .
192 Range: rdfs:Resource .

193 ps:model-HasAssociatedDoseAmount-DataPool

194 label: dose regimen.
195 Comment:
196 Domain: pmlo:PharmMLO_0000001 .
197 Range: rdfs:Resource .

198 ps:trialdesign-HasAssociatedDoseFrequency-DataPool

199 label: dose frequency.
200 Comment:
201 Domain: pmlo:PharmMLO_0000006 .
202 Range: rdfs:Resource .

203 ps:model-HasAssociatedDoseFrequency-DataPool

204 label: dose frequency.
205 Comment:
206 Domain: pmlo:PharmMLO_0000001 .
207 Range: rdfs:Resource .

208 ps:trialdesign-observed-variables-are-real-freetext

209 label: observed variables are real.
210 Comment:
211 Domain: pmlo:PharmMLO_0000006 .
212 Range: rdfs:Literal .

213 ps:model-observed-variables-are-real-freetext

214 label: observed variables are real.
215 Comment:
216 Domain: pmlo:PharmMLO_0000001 .
217 Range: rdfs:Literal .

218 ps:trialdesign-HasAssociatedSamplingDesign-DataPool

219 label: sampling design.
220 Comment:
221 Domain: pmlo:PharmMLO_0000006 .
222 Range: rdfs:Resource .

223 ps:model-HasAssociatedSamplingDesign-DataPool

224 label: sampling design.
225 Comment:
226 Domain: pmlo:PharmMLO_0000006 .
227 Range: rdfs:Resource .

228 ps:trialdesign-HasAssociatedNumberOfSubjects-DataPool

229 label: number of subjects.
230 Comment:
231 Domain: pmlo:PharmMLO_0000006 .
232 Range: rdfs:Literal .

233 ps:model-HasAssociatedNumberOfSubjects-DataPool

234 label: number of subjects.
235 Comment:
236 Domain: pmlo:PharmMLO_0000001 .
237 Range: rdfs:Literal .

238 ps:trialdesign-HasAssociatedNumberOfModelledObservations-DataPool

239 label: number of observations.
240 Comment:
241 Domain: pmlo:PharmMLO_0000006 .
242 Range: rdfs:Literal .

243 ps:model-HasAssociatedNumberOfModelledObservations-DataPool

244 label: number of observations.

245 Comment:

246 Domain: pmlo:PharmMLO_0000001 .

247 Range: rdfs:Literal .

248 ps:modeldefinition-HasAssociatedInputType

249 label: type of input.

250 Comment:

251 Domain: pmlo:PharmMLO_0000013 .

252 Range: rdfs:Resource .

253 ps:modeldefinition-HasAssociatedAbsorptionDelayModelType

254 label: type of model for absorption delay.

255 Comment:

256 Domain: pmlo:PharmMLO_0000013 .

257 Range: rdfs:Resource .

258 ps:modeldefinition-HasAssociatedAbsorptionRateType

259 label: type of modelled absorption rate.

260 Comment:

261 Domain: pmlo:PharmMLO_0000013 .

262 Range: rdfs:Resource .

263 ps:modeldefinition-HasAssociatedBioavailabilityType

264 label: type of modelled bioavailability.

265 Comment:

266 Domain: pmlo:PharmMLO_0000013 .

267 Range: rdfs:Resource .

268 ps:modeldefinition-InputPresentsFormationFromOtherSubstance-string

269 label: modelled formation from other substance.

270 Comment:

271 Domain: pmlo:PharmMLO_0000013 .

272 Range: rdfs:Resource .

273 ps:modeldefinition-InputPresentsFormationFromOtherSubstanceType

274 label: modelled formation from type of substance.

275 Comment:

276 Domain: pmlo:PharmMLO_0000013 .

277 Range: rdfs:Resource .

278 ps:modeldefinition-InputPresentsFormationFromOtherSubstanceModelType

279 label: model for formation from another substance.

280 Comment:

281 Domain: pmlo:PharmMLO_0000013 .

282 Range: rdfs:Resource .

283 ps:model-HasAssociatedInputType

284 label: type of input.

285 Comment:

286 Domain: pmlo:PharmMLO_0000001 .

287 Range: rdfs:Resource .

288 ps:model-HasAssociatedAbsorptionDelayModelType

289 label: type of model for absorption delay.

290 Comment:

291 Domain: pmlo:PharmMLO_0000001 .

292 Range: rdfs:Resource .

293 ps:model-HasAssociatedAbsorptionRateType

294 label: type of modelled absorption rate.

295 Comment:

296 Domain: pmlo:PharmMLO_0000001 .

297 Range: rdfs:Resource .

298 ps:model-HasAssociatedBioavailabilityType

299 label: type of modelled bioavailability.

300 Comment:

301 Domain: pmlo:PharmMLO_0000001 .

302 Range: rdfs:Resource .

303 ps:model-InputPresentsFormationFromOtherSubstance-string

304 label: modelled formation from other stubstance.

305 Comment:

306 Domain: pmlo:PharmMLO_0000001 .

307 Range: rdfs:Resource .

308 ps:model-InputPresentsFormationFromOtherSubstanceType

309 label: modelled formation from type of susbtance.

310 Comment:

311 Domain: pmlo:PharmMLO_0000001 .

312 Range: rdfs:Resource .

313 ps:model-InputPresentsFormationFromOtherSubstanceModelType

314 label: model for formation from another substance.

315 Comment:

316 Domain: pmlo:PharmMLO_0000001 .

317 Range: rdfs:Resource .

318 ps:modeldefinition-HasAssociatedAbsorptionDelayModelType-freetext

319 label: .

320 Comment:

321 Domain: pmlo:PharmMLO_0000013 .

322 Range: rdfs:Literal .

323 ps:modeldefinition-HasAssociatedAbsorptionRateType-freetext

324 label: .

325 Comment:

326 Domain: pmlo:PharmMLO_0000013 .

327 Range: rdfs:Literal .

328 ps:modeldefinition-HasAssociatedBioavailabilityType-freetext

329 label: .

330 Comment:

331 Domain: pmlo:PharmMLO_0000013 .

332 Range: rdfs:Literal .

333 **ps:modeldefinition-InputPresentsFormationFromOtherSubstanceType-freetext**
334 label: .
335 Comment:
336 Domain: pmlo:PharmMLO_0000013 .
337 Range: rdfs:Literal .

338 **ps:modeldefinition-InputPresentsFormationFromOtherSubstanceModelType-**
339 **freetext**
340 label: .
341 Comment:
342 Domain: pmlo:PharmMLO_0000013 .
343 Range: rdfs:Literal .

344 **ps:model-HasAssociatedAbsorptionDelayModelType-freetext**
345 label: .
346 Comment:
347 Domain: pmlo:PharmMLO_0000001 .
348 Range: rdfs:Literal .

349 **ps:model-HasAssociatedAbsorptionRateType-freetext**
350 label: .
351 Comment:
352 Domain: pmlo:PharmMLO_0000001 .
353 Range: rdfs:Literal .

354 **ps:model-HasAssociatedBioavailabilityType-freetext**
355 label: .
356 Comment:
357 Domain: pmlo:PharmMLO_0000001 .
358 Range: rdfs:Literal .

359 **ps:model-InputPresentsFormationFromOtherSubstanceType-freetext**
360 label: .
361 Comment:
362 Domain: pmlo:PharmMLO_0000001 .
363 Range: rdfs:Literal .

364 **ps:model-InputPresentsFormationFromOtherSubstanceModelType-freetext**

365 label: .
366 Comment:
367 Domain: pmlo:PharmMLO_0000001 .
368 Range: rdfs:Literal .

369 **ps:modeldefinition-HasAssociatedNumberOfModelledCompartments**

370 label: .
371 Comment:
372 Domain: pmlo:PharmMLO_0000013 .
373 Range: rdfs:Literal .

374 **ps:model-HasHassociatedNumberOfModelledCompartments**

375 label: number of modelled compartments.
376 Comment:
377 Domain: pmlo:PharmMLO_0000001 .
378 Range: rdfs:Literal .

379 **ps:modeldefinition-HasAssociatedDistributionModellingAttribute-string**

380 label: .
381 Comment:
382 Domain: pmlo:PharmMLO_0000013 .
383 Range: rdfs:Literal .

384 **ps:model-HasAssociatedDistributionModellingAttribute-string**

385 label: .
386 Comment:
387 Domain: pmlo:PharmMLO_0000001 .
388 Range: rdfs:Literal .

389 **ps:modeldefinition-HasAssociatedDistributionModellingAttribute-EnterohepaticRecyclin**

390 label: enterohepatic recycling.
391 Comment:
392 Domain: pmlo:PharmMLO_0000013 .
393 Range: rdfs:Resource .

394 **ps:modeldefinition-HasAssociatedDistributionModellingAttribute-NonLinearTransport**
395 label: non linear transport.
396 Comment:
397 Domain: pmlo:PharmMLO_0000013 .
398 Range: rdfs:Resource .

399 **ps:modeldefinition-HasAssociatedDistributionModellingAttribute-NonLinearProteinBind**
400 label: non linear protein binding.
401 Comment:
402 Domain: pmlo:PharmMLO_0000013 .
403 Range: rdfs:Resource .

404 **ps:model-HasAssociatedDistributionModellingAttribute-EnterohepaticRecycling**
405 label: enterohepatic recycling.
406 Comment:
407 Domain: pmlo:PharmMLO_0000001 .
408 Range: rdfs:Resource .

409 **ps:model-HasAssociatedDistributionModellingAttribute-NonLinearTransport**
410 label: non linear transport.
411 Comment:
412 Domain: pmlo:PharmMLO_0000001 .
413 Range: rdfs:Resource .

414 **ps:model-HasAssociatedDistributionModellingAttribute-NonLinearProteinBinding**
415 label: non linear protein binding.
416 Comment:
417 Domain: pmlo:PharmMLO_0000001 .
418 Range: rdfs:Resource .

419 **ps:modeldefinition-HasAssociatedEliminationModellingAttribute-CompartmentOfElimin**
420 label: .
421 Comment:
422 Domain: pmlo:PharmMLO_0000013 .
423 Range: rdfs:Resource .

424 **ps:model-HasAssociatedEliminationModellingAttribute-CompartmentOfElimination**
425 label: .
426 Comment:
427 Domain: pmlo:PharmMLO_0000001 .
428 Range: rdfs:Resource .

429 **ps:modeldefinition-HasAssociatedEliminationModellingAttribute-TypeOfElimination**
430 label: .
431 Comment:
432 Domain: pmlo:PharmMLO_0000013 .
433 Range: rdfs:Resource .

434 **ps:model-HasAssociatedEliminationModellingAttribute-TypeOfElimination**
435 label: .
436 Comment:
437 Domain: pmlo:PharmMLO_0000001 .
438 Range: rdfs:Resource .

439 **ps:modeldefinition-HasAssociatedModelledDrugFreeSystemType**
440 label: .
441 Comment:
442 Domain: pmlo:PharmMLO_0000013 .
443 Range: rdfs:Resource .

444 **ps:model-HasAssociatedModelledDrugFreeSystemType**
445 label: .
446 Comment:
447 Domain: pmlo:PharmMLO_0000001 .
448 Range: rdfs:Resource .

449 **ps:modeldefinition-HasShapeOfDrugEffectTypeAttribute**
450 label: shape of drug effect.
451 Comment:
452 Domain: pmlo:PharmMLO_0000013 .
453 Range: rdfs:Resource .

454 ps:modeldefinition-HasDriverOfDrugEffectTypeAttribute

455 label: driver of drug effect.
456 Comment:
457 Domain: pmlo:PharmMLO_0000013 .
458 Range: rdfs:Resource .

459 ps:modeldefinition-HasTemporalRelationBetweenDrugEffectAndResponseTypeAttribute

460 label: temporal relation between drug effect and response.
461 Comment:
462 Domain: pmlo:PharmMLO_0000013 .
463 Range: rdfs:Resource .

464 ps:modeldefinition-HasModelForResponseType

465 label: type of response.
466 Comment:
467 Domain: pmlo:PharmMLO_0000013 .
468 Range: rdfs:Resource .

469 ps:model-HasShapeOfDrugEffectTypeAttribute

470 label: shape of drug effect.
471 Comment:
472 Domain: pmlo:PharmMLO_0000001 .
473 Range: rdfs:Resource .

474 ps:model-HasDriverOfDrugEffectTypeAttribute

475 label: driver of drug effect.
476 Comment:
477 Domain: pmlo:PharmMLO_0000001 .
478 Range: rdfs:Resource .

479 ps:model-HasTemporalRelationBetweenDrugEffectAndResponseTypeAttribute

480 label: temporal relation between drug effect and response.
481 Comment:
482 Domain: pmlo:PharmMLO_0000001 .
483 Range: rdfs:Resource .

484 ps:model-HasModelForResponseType

485 label: type of response.
486 Comment:
487 Domain: pmlo:PharmMLO_0000001 .
488 Range: rdfs:Resource .

489 ps:trialdesign-HasStudiedSubstanceAttribute

490 label: type of studied substance.
491 Comment: studied substance
492 Domain: pmlo:PharmMLO_0000006 .
493 Range: rdfs:Resource .

494 ps:model-HasStudiedSubstanceAttribute

495 label: type of studied substance.
496 Comment: studied substance
497 Domain: pmlo:PharmMLO_0000001 .
498 Range: rdfs:Resource .

499 ps:drug-ChebiIdOfDrug1

500 label: CHEBI ID of drug 1.
501 Comment:
502 Domain: pkpd:PKPD_0007172 .
503 Range: rdfs:Resource .

504 ps:drug-DrugBankIdOfDrug1

505 label: DrugBank ID of drug 1.
506 Comment:
507 Domain: pkpd:PKPD_0007172 .
508 Range: rdfs:Resource .

509 ps:drug-NameOfDrug1-freetext

510 label: name of drug 1.
511 Comment:
512 Domain: pkpd:PKPD_0007172 .
513 Range: rdfs:Literal .

514 ps:drug-TypeOfDrug1

515 label: type of drug 1.
516 Comment:
517 Domain: pkpd:PKPD_0007172 .
518 Range: rdfs:Resource .

519 ps:model-ChebiIdOfDrug1

520 label: CHEBI ID of drug 1.
521 Comment:
522 Domain: pmlo:PharmMLO_0000001 .
523 Range: rdfs:Resource .

524 ps:model-DrugBankIdOfDrug1

525 label: DrugBank ID of drug 1.
526 Comment:
527 Domain: pmlo:PharmMLO_0000001 .
528 Range: rdfs:Resource .

529 ps:model-NameOfDrug1-freetext

530 label: name of drug 1.
531 Comment:
532 Domain: pmlo:PharmMLO_0000001 .
533 Range: rdfs:Literal .

534 ps:model-TypeOfDrug1

535 label: type of drug 1.
536 Comment:
537 Domain: pmlo:PharmMLO_0000001 .
538 Range: rdfs:Resource .

539 ps:drug-ChebiIdOfDrug2

540 label: CHEBI ID of drug 2.
541 Comment:
542 Domain: pkpd:PKPD_0007172 .
543 Range: rdfs:Resource .

544 ps:drug-DrugBankIdOfDrug2

545 label: DrugBank ID of drug 2.
546 Comment:
547 Domain: pkpd:PKPD_0007172 .
548 Range: rdfs:Resource .

549 ps:drug-NameOfDrug2-freetext

550 label: name of drug 2.
551 Comment:
552 Domain: pkpd:PKPD_0007172 .
553 Range: rdfs:Literal .

554 ps:drug-TypeOfDrug2

555 label: type of drug 2.
556 Comment:
557 Domain: pkpd:PKPD_0007172 .
558 Range: rdfs:Resource .

559 ps:model-ChebiIdOfDrug2

560 label: CHEBI ID of drug 2.
561 Comment:
562 Domain: pmlo:PharmMLO_0000001 .
563 Range: rdfs:Resource .

564 ps:model-DrugBankIdOfDrug2

565 label: DrugBank ID of drug 2.
566 Comment:
567 Domain: pmlo:PharmMLO_0000001 .
568 Range: rdfs:Resource .

569 ps:model-NameOfDrug2-freetext

570 label: name of drug 2.
571 Comment:
572 Domain: pmlo:PharmMLO_0000001 .
573 Range: rdfs:Literal .

574 ps:model-TypeOfDrug2

575 label: type of drug 2.
576 Comment:
577 Domain: pmlo:PharmMLO_0000001 .
578 Range: rdfs:Resource .

579 ps:drug-ChebiIdOfDrug3

580 label: CHEBI ID of drug 3.
581 Comment:
582 Domain: pkpd:PKPD_0007172 .
583 Range: rdfs:Resource .

584 ps:drug-DrugBankIdOfDrug3

585 label: DrugBank ID of drug 3.
586 Comment:
587 Domain: pkpd:PKPD_0007172 .
588 Range: rdfs:Resource .

589 ps:drug-NameOfDrug3-freetext

590 label: name of drug 3.
591 Comment:
592 Domain: pkpd:PKPD_0007172 .
593 Range: rdfs:Literal .

594 ps:drug-TypeOfDrug3

595 label: type of drug 3.
596 Comment:
597 Domain: pkpd:PKPD_0007172 .
598 Range: rdfs:Resource .

599 ps:model-ChebiIdOfDrug3

600 label: CHEBI ID of drug 3.
601 Comment:
602 Domain: pmlo:PharmMLO_0000001 .
603 Range: rdfs:Resource .

604 ps:model-DrugBankIdOfDrug3

605 label: DrugBank ID of drug 3.

606 Comment:

607 Domain: pmlo:PharmMLO_0000001 .

608 Range: rdfs:Resource .

609 ps:model-NameOfDrug3-freetext

610 label: name of drug 3.

611 Comment:

612 Domain: pmlo:PharmMLO_0000001 .

613 Range: rdfs:Literal .

614 ps:model-TypeOfDrug3

615 label: type of drug 3.

616 Comment:

617 Domain: pmlo:PharmMLO_0000001 .

618 Range: rdfs:Resource .

619 ps:drug-ChebiIdOfDrug4

620 label: CHEBI ID of drug 4.

621 Comment:

622 Domain: pkpd:PKPD_0007172 .

623 Range: rdfs:Resource .

624 ps:drug-DrugBankIdOfDrug4

625 label: DrugBank ID of drug 4.

626 Comment:

627 Domain: pkpd:PKPD_0007172 .

628 Range: rdfs:Resource .

629 ps:drug-NameOfDrug4-freetext

630 label: name of drug 4.

631 Comment:

632 Domain: pkpd:PKPD_0007172 .

633 Range: rdfs:Literal .

634 ps:drug-TypeOfDrug4

635 label: type of drug 4.
636 Comment:
637 Domain: pkpd:PKPD_0007172 .
638 Range: rdfs:Resource .

639 ps:model-ChebiIdOfDrug4

640 label: CHEBI ID of drug 4.
641 Comment:
642 Domain: pmlo:PharmMLO_0000001 .
643 Range: rdfs:Resource .

644 ps:model-DrugBankIdOfDrug4

645 label: DrugBank ID of drug 4.
646 Comment:
647 Domain: pmlo:PharmMLO_0000001 .
648 Range: rdfs:Resource .

649 ps:model-NameOfDrug4-freetext

650 label: name of drug 4.
651 Comment:
652 Domain: pmlo:PharmMLO_0000001 .
653 Range: rdfs:Literal .

654 ps:model-TypeOfDrug4

655 label: type of drug 4.
656 Comment:
657 Domain: pmlo:PharmMLO_0000001 .
658 Range: rdfs:Resource .

659 ps:drug-ChebiIdOfDrug5

660 label: CHEBI ID of drug 5.
661 Comment:
662 Domain: pkpd:PKPD_0007172 .
663 Range: rdfs:Resource .

664 ps:drug-DrugBankIdOfDrug5

665 label: DrugBank ID of drug 5.
666 Comment:
667 Domain: pkpd:PKPD_0007172 .
668 Range: rdfs:Resource .

669 ps:drug-NameOfDrug5-freetext

670 label: name of drug 5.
671 Comment:
672 Domain: pkpd:PKPD_0007172 .
673 Range: rdfs:Literal .

674 ps:drug-TypeOfDrug5

675 label: type of drug 5.
676 Comment:
677 Domain: pkpd:PKPD_0007172 .
678 Range: rdfs:Resource .

679 ps:model-ChebiIdOfDrug5

680 label: CHEBI ID of drug 5.
681 Comment:
682 Domain: pmlo:PharmMLO_0000001 .
683 Range: rdfs:Resource .

684 ps:model-DrugBankIdOfDrug5

685 label: DrugBank ID of drug 5.
686 Comment:
687 Domain: pmlo:PharmMLO_0000001 .
688 Range: rdfs:Resource .

689 ps:model-NameOfDrug5-freetext

690 label: name of drug 5.
691 Comment:
692 Domain: pmlo:PharmMLO_0000001 .
693 Range: rdfs:Literal .

694 ps:model-TypeOfDrug5

695 label: type of drug 5.
696 Comment:
697 Domain: pmlo:PharmMLO_0000001 .
698 Range: rdfs:Resource .

699 ps:trialdesign-hasListOfInteractingDrugs-freetext

700 label: has list of interacting drugs.
701 Comment:
702 Domain: pmlo:PharmMLO_0000006 .
703 Range: rdfs:Literal .

704 ps:trialdesign-hasInteractorByNickname-freetext

705 label: has interactor in drug interaction.
706 Comment:
707 Domain: pmlo:PharmMLO_0000006 .
708 Range: rdfs:Literal .

709 ps:trialdesign-hasInteracteeByNickname-freetext

710 label: has interactee in drug interaction.
711 Comment:
712 Domain: pmlo:PharmMLO_0000006 .
713 Range: rdfs:Literal .

714 ps:trialdesign-hasTypeOfModelComponentImpacted

715 label: has type of model component impacted.
716 Comment:
717 Domain: pmlo:PharmMLO_0000006 .
718 Range: rdfs:Resource .

719 ps:model-hasListOfInteractingDrugs-freetext

720 label: has list of interacting drugs.
721 Comment:
722 Domain: pmlo:PharmMLO_0000001 .
723 Range: rdfs:Literal .

724 ps:model-hasInteractorByNickname-freetext

725 label: has interactor in drug interaction.

726 Comment:

727 Domain: pmlo:PharmMLO_0000001 .

728 Range: rdfs:Literal .

729 ps:model-hasInteracteeByNickname-freetext

730 label: has interactee in drug interaction.

731 Comment:

732 Domain: pmlo:PharmMLO_0000001 .

733 Range: rdfs:Literal .

734 ps:model-hasTypeOfModelComponentImpacted

735 label: has type of model component impacted.

736 Comment:

737 Domain: pmlo:PharmMLO_0000001 .

738 Range: rdfs:Resource .

739 ps:drug-hasDoseAmountMin-Drug1

740 label: has min dose amount for drug 1.

741 Comment:

742 Domain: pkpd:PKPD_0007172 .

743 Range: rdfs:Literal .

744 ps:drug-hasDoseAmountMax-Drug1

745 label: has max dose amount for drug 1.

746 Comment:

747 Domain: pkpd:PKPD_0007172 .

748 Range: rdfs:Literal .

749 ps:drug-hasDoseAmountUnit-Drug1

750 label: has doseamount unit for drug 1.

751 Comment:

752 Domain: pkpd:PKPD_0007172 .

753 Range: rdfs:Resource .

754 ps:drug-hasDoseAmountMin-Drug2

755 label: has min dose amount for drug 2.

756 Comment:

757 Domain: pkpd:PKPD_0007172 .

758 Range: rdfs:Literal .

759 ps:drug-hasDoseAmountMax-Drug2

760 label: has max dose amount for drug 2.

761 Comment:

762 Domain: pkpd:PKPD_0007172 .

763 Range: rdfs:Literal .

764 ps:drug-hasDoseAmountUnit-Drug2

765 label: has doseamount unit for drug 2.

766 Comment:

767 Domain: pkpd:PKPD_0007172 .

768 Range: rdfs:Resource .

769 ps:drug-hasDoseAmountMin-Drug3

770 label: has min dose amount for drug 3.

771 Comment:

772 Domain: pkpd:PKPD_0007172 .

773 Range: rdfs:Literal .

774 ps:drug-hasDoseAmountMax-Drug3

775 label: has max dose amount for drug 3.

776 Comment:

777 Domain: pkpd:PKPD_0007172 .

778 Range: rdfs:Literal .

779 ps:drug-hasDoseAmountUnit-Drug3

780 label: has doseamount unit for drug 3.

781 Comment:

782 Domain: pkpd:PKPD_0007172 .

783 Range: rdfs:Resource .

784 ps:drug-hasDoseAmountMin-Drug4

785 label: has min dose amount for drug 4.

786 Comment:

787 Domain: pkpd:PKPD_0007172 .

788 Range: rdfs:Literal .

789 ps:drug-hasDoseAmountMax-Drug4

790 label: has max dose amount for drug 4.

791 Comment:

792 Domain: pkpd:PKPD_0007172 .

793 Range: rdfs:Literal .

794 ps:drug-hasDoseAmountUnit-Drug4

795 label: has doseamount unit for drug 4.

796 Comment:

797 Domain: pkpd:PKPD_0007172 .

798 Range: rdfs:Resource .

799 ps:drug-hasDoseAmountMin-Drug5

800 label: has min dose amount for drug 5.

801 Comment:

802 Domain: pkpd:PKPD_0007172 .

803 Range: rdfs:Literal .

804 ps:drug-hasDoseAmountMax-Drug5

805 label: has max dose amount for drug 5.

806 Comment:

807 Domain: pkpd:PKPD_0007172 .

808 Range: rdfs:Literal .

809 ps:drug-hasDoseAmountUnit-Drug5

810 label: has doseamount unit for drug 5.

811 Comment:

812 Domain: pkpd:PKPD_0007172 .

813 Range: rdfs:Resource .

814 ps:model-hasDoseAmountMin-Drug1

815 label: has min dose amount for drug 1.

816 Comment:

817 Domain: pkpd:PKPD_0007172 .

818 Range: rdfs:Literal .

819 ps:model-hasDoseAmountMax-Drug1

820 label: has max dose amount for drug 1.

821 Comment:

822 Domain: pkpd:PKPD_0007172 .

823 Range: rdfs:Literal .

824 ps:model-hasDoseAmountUnit-Drug1

825 label: has doseamount unit for drug 1.

826 Comment:

827 Domain: pkpd:PKPD_0007172 .

828 Range: rdfs:Resource .

829 ps:model-hasDoseAmountMin-Drug2

830 label: has min dose amount for drug 2.

831 Comment:

832 Domain: pkpd:PKPD_0007172 .

833 Range: rdfs:Literal .

834 ps:model-hasDoseAmountMax-Drug2

835 label: has max dose amount for drug 2.

836 Comment:

837 Domain: pkpd:PKPD_0007172 .

838 Range: rdfs:Literal .

839 ps:model-hasDoseAmountUnit-Drug2

840 label: has doseamount unit for drug 2.

841 Comment:

842 Domain: pkpd:PKPD_0007172 .

843 Range: rdfs:Resource .

844 ps:model-hasDoseAmountMin-Drug3

845 label: has min dose amount for drug 3.

846 Comment:

847 Domain: pkpd:PKPD_0007172 .

848 Range: rdfs:Literal .

849 ps:model-hasDoseAmountMax-Drug3

850 label: has max dose amount for drug 3.

851 Comment:

852 Domain: pkpd:PKPD_0007172 .

853 Range: rdfs:Literal .

854 ps:model-hasDoseAmountUnit-Drug3

855 label: has doseamount unit for drug 3.

856 Comment:

857 Domain: pkpd:PKPD_0007172 .

858 Range: rdfs:Resource .

859 ps:model-hasDoseAmountMin-Drug4

860 label: has min dose amount for drug 4.

861 Comment:

862 Domain: pkpd:PKPD_0007172 .

863 Range: rdfs:Literal .

864 ps:model-hasDoseAmountMax-Drug4

865 label: has max dose amount for drug 4.

866 Comment:

867 Domain: pkpd:PKPD_0007172 .

868 Range: rdfs:Literal .

869 ps:model-hasDoseAmountUnit-Drug4

870 label: has doseamount unit for drug 4.

871 Comment:

872 Domain: pkpd:PKPD_0007172 .

873 Range: rdfs:Resource .

874 ps:model-hasDoseAmountMin-Drug5

875 label: has min dose amount for drug 5.

876 Comment:

877 Domain: pkpd:PKPD_0007172 .

878 Range: rdfs:Literal .

879 ps:model-hasDoseAmountMax-Drug5

880 label: has max dose amount for drug 5.

881 Comment:

882 Domain: pkpd:PKPD_0007172 .

883 Range: rdfs:Literal .

884 ps:model-hasDoseAmountUnit-Drug5

885 label: has doseamount unit for drug 5.

886 Comment:

887 Domain: pkpd:PKPD_0007172 .

888 Range: rdfs:Resource .

889 ps:observedvariable-OVLinksToDrug-OV1

890 label: links to drug.

891 Comment:

892 Domain: pkpd:PKPD_0008106 .

893 Range: rdfs:Literal .

894 ps:observedvariable-OVHasNature-OV1

895 label: has nature.

896 Comment:

897 Domain: pkpd:PKPD_0008106 .

898 Range: rdfs:Resource .

899 ps:observedvariable-OVHasUnits-OV1

900 label: has units.

901 Comment:

902 Domain: pkpd:PKPD_0008106 .

903 Range: rdfs:Resource .

904 ps:observedvariable-OVHasMatrixType-OV1

905 label: has matrix type.

906 Comment:

907 Domain: pkpd:PKPD_0008106 .

908 Range: rdfs:Resource .

909 ps:observedvariable-OVHasTypeOfObservedVariable-OV1

910 label: has type.

911 Comment:

912 Domain: pkpd:PKPD_0008106 .

913 Range: rdfs:Resource .

914 ps:observedvariable-OVLinksToDrug-OV2

915 label: links to drug.

916 Comment:

917 Domain: pkpd:PKPD_0008106 .

918 Range: rdfs:Literal .

919 ps:observedvariable-OVHasNature-OV2

920 label: has nature.

921 Comment:

922 Domain: pkpd:PKPD_0008106 .

923 Range: rdfs:Resource .

924 ps:observedvariable-OVHasUnits-OV2

925 label: has units.

926 Comment:

927 Domain: pkpd:PKPD_0008106 .

928 Range: rdfs:Resource .

929 ps:observedvariable-OVHasMatrixType-OV2

930 label: has matrix type.

931 Comment:

932 Domain: pkpd:PKPD_0008106 .

933 Range: rdfs:Resource .

934 ps:observedvariable-OVHasTypeOfObservedVariable-OV2

935 label: has type.
936 Comment:
937 Domain: pkpd:PKPD_0008106 .
938 Range: rdfs:Resource .

939 ps:observedvariable-OVLinksToDrug-OV3

940 label: links to drug.
941 Comment:
942 Domain: pkpd:PKPD_0008106 .
943 Range: rdfs:Literal .

944 ps:observedvariable-OVHasNature-OV3

945 label: has nature.
946 Comment:
947 Domain: pkpd:PKPD_0008106 .
948 Range: rdfs:Resource .

949 ps:observedvariable-OVHasUnits-OV3

950 label: has units.
951 Comment:
952 Domain: pkpd:PKPD_0008106 .
953 Range: rdfs:Resource .

954 ps:observedvariable-OVHasMatrixType-OV3

955 label: has matrix type.
956 Comment:
957 Domain: pkpd:PKPD_0008106 .
958 Range: rdfs:Resource .

959 ps:observedvariable-OVHasTypeOfObservedVariable-OV3

960 label: has type.
961 Comment:
962 Domain: pkpd:PKPD_0008106 .
963 Range: rdfs:Resource .

964 ps:observedvariable-OVLinksToDrug-OV4

965 label: links to drug.
966 Comment:
967 Domain: pkpd:PKPD_0008106 .
968 Range: rdfs:Literal .

969 ps:observedvariable-OVHasNature-OV4

970 label: has nature.
971 Comment:
972 Domain: pkpd:PKPD_0008106 .
973 Range: rdfs:Resource .

974 ps:observedvariable-OVHasUnits-OV4

975 label: has units.
976 Comment:
977 Domain: pkpd:PKPD_0008106 .
978 Range: rdfs:Resource .

979 ps:observedvariable-OVHasMatrixType-OV4

980 label: has matrix type.
981 Comment:
982 Domain: pkpd:PKPD_0008106 .
983 Range: rdfs:Resource .

984 ps:observedvariable-OVHasTypeOfObservedVariable-OV4

985 label: has type.
986 Comment:
987 Domain: pkpd:PKPD_0008106 .
988 Range: rdfs:Resource .

989 ps:observedvariable-OVLinksToDrug-OV5

990 label: links to drug.
991 Comment:
992 Domain: pkpd:PKPD_0008106 .
993 Range: rdfs:Literal .

994 ps:observedvariable-OVHasNature-OV5

995 label: has nature.
996 Comment:
997 Domain: pkpd:PKPD_0008106 .
998 Range: rdfs:Resource .

999 ps:observedvariable-OVHasUnits-OV5

1000 label: has units.
1001 Comment:
1002 Domain: pkpd:PKPD_0008106 .
1003 Range: rdfs:Resource .

1004 ps:observedvariable-OVHasMatrixType-OV5

1005 label: has matrix type.
1006 Comment:
1007 Domain: pkpd:PKPD_0008106 .
1008 Range: rdfs:Resource .

1009 ps:observedvariable-OVHasTypeOfObservedVariable-OV5

1010 label: has type.
1011 Comment:
1012 Domain: pkpd:PKPD_0008106 .
1013 Range: rdfs:Resource .

1014 ps:model-OVLinksToDrug-OV1

1015 label: links to drug.
1016 Comment:
1017 Domain: pmlo:PharmMLO_0000001 .
1018 Range: rdfs:Literal .

1019 ps:model-OVHasNature-OV1

1020 label: has nature.
1021 Comment:
1022 Domain: pmlo:PharmMLO_0000001 .
1023 Range: rdfs:Resource .

1024 ps:model-OVHasUnits-OV1

1025 label: has units.
1026 Comment:
1027 Domain: pmlo:PharmMLO_0000001 .
1028 Range: rdfs:Resource .

1029 ps:model-OVHasMatrixType-OV1

1030 label: has matrix type.
1031 Comment:
1032 Domain: pmlo:PharmMLO_0000001 .
1033 Range: rdfs:Resource .

1034 ps:model-OVHasTypeOfObservedVariable-OV1

1035 label: has type.
1036 Comment:
1037 Domain: pmlo:PharmMLO_0000001 .
1038 Range: rdfs:Resource .

1039 ps:model-OVLinksToDrug-OV2

1040 label: links to drug.
1041 Comment:
1042 Domain: pmlo:PharmMLO_0000001 .
1043 Range: rdfs:Literal .

1044 ps:model-OVHasNature-OV2

1045 label: has nature.
1046 Comment:
1047 Domain: pmlo:PharmMLO_0000001 .
1048 Range: rdfs:Resource .

1049 ps:model-OVHasUnits-OV2

1050 label: has units.
1051 Comment:
1052 Domain: pmlo:PharmMLO_0000001 .
1053 Range: rdfs:Resource .

1054 ps:model-OVHasMatrixType-OV2

1055 label: has matrix type.

1056 Comment:

1057 Domain: pmlo:PharmMLO_0000001 .

1058 Range: rdfs:Resource .

1059 ps:model-OVHasTypeOfObservedVariable-OV2

1060 label: has type.

1061 Comment:

1062 Domain: pmlo:PharmMLO_0000001 .

1063 Range: rdfs:Resource .

1064 ps:model-OVLinksToDrug-OV3

1065 label: links to drug.

1066 Comment:

1067 Domain: pmlo:PharmMLO_0000001 .

1068 Range: rdfs:Literal .

1069 ps:model-OVHasNature-OV3

1070 label: has nature.

1071 Comment:

1072 Domain: pmlo:PharmMLO_0000001 .

1073 Range: rdfs:Resource .

1074 ps:model-OVHasUnits-OV3

1075 label: has units.

1076 Comment:

1077 Domain: pmlo:PharmMLO_0000001 .

1078 Range: rdfs:Resource .

1079 ps:model-OVHasMatrixType-OV3

1080 label: has matrix type.

1081 Comment:

1082 Domain: pmlo:PharmMLO_0000001 .

1083 Range: rdfs:Resource .

1084 ps:model-OVHasTypeOfObservedVariable-OV3

1085 label: has type.
1086 Comment:
1087 Domain: pmlo:PharmMLO_0000001 .
1088 Range: rdfs:Resource .

1089 ps:model-OVLinksToDrug-OV4

1090 label: links to drug.
1091 Comment:
1092 Domain: pmlo:PharmMLO_0000001 .
1093 Range: rdfs:Literal .

1094 ps:model-OVHasNature-OV4

1095 label: has nature.
1096 Comment:
1097 Domain: pmlo:PharmMLO_0000001 .
1098 Range: rdfs:Resource .

1099 ps:model-OVHasUnits-OV4

1100 label: has units.
1101 Comment:
1102 Domain: pmlo:PharmMLO_0000001 .
1103 Range: rdfs:Resource .

1104 ps:model-OVHasMatrixType-OV4

1105 label: has matrix type.
1106 Comment:
1107 Domain: pmlo:PharmMLO_0000001 .
1108 Range: rdfs:Resource .

1109 ps:model-OVHasTypeOfObservedVariable-OV4

1110 label: has type.
1111 Comment:
1112 Domain: pmlo:PharmMLO_0000001 .
1113 Range: rdfs:Resource .

1114 ps:model-OVLinksToDrug-OV5

1115 label: links to drug.
1116 Comment:
1117 Domain: pmlo:PharmMLO_0000001 .
1118 Range: rdfs:Literal .

1119 ps:model-OVHasNature-OV5

1120 label: has nature.
1121 Comment:
1122 Domain: pmlo:PharmMLO_0000001 .
1123 Range: rdfs:Resource .

1124 ps:model-OVHasUnits-OV5

1125 label: has units.
1126 Comment:
1127 Domain: pmlo:PharmMLO_0000001 .
1128 Range: rdfs:Resource .

1129 ps:model-OVHasMatrixType-OV5

1130 label: has matrix type.
1131 Comment:
1132 Domain: pmlo:PharmMLO_0000001 .
1133 Range: rdfs:Resource .

1134 ps:model-OVHasTypeOfObservedVariable-OV5

1135 label: has type.
1136 Comment:
1137 Domain: pmlo:PharmMLO_0000001 .
1138 Range: rdfs:Resource .

1139 ps:structuralmodel-HasComponentType

1140 label: has component type.
1141 Comment:
1142 Domain: pmlo:PharmMLO_0000010 .
1143 Range: rdfs:Resource .

1144 **ps:model-HasComponentType**
1145 label: has component type.
1146 Comment:
1147 Domain: pmlo:PharmMLO_0000001 .
1148 Range: rdfs:Resource .