```
tc_pred_unprime  THM

⊢  ∀P:Fmla, ds:Collection(dec()), da:Collection(SimpleType), de:sig().
|  tc_pred(P;ds;da;de) ⟺ tc_pred(pred_unprime(P);ds;da;de)
| by Unfold `tc_pred` 0 THEN Auto
THEN Try (Fold `pred` 0 THEN Auto)
|
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| 1. P : Fmla
| 2. ds : Collection(dec())
| 3. da : Collection(SimpleType)
| 4. de : sig()
| 5. ∀r:rel(). r ∈ P ⇒ tc(r;ds;da;de)
| 6. r : rel()
| 7. r ∈ pred_unprime(P)
| ⊢  tc(r;ds;da;de)
|   by Unfold `pred_unprime` (-1) THEN
|    RW ColMemberC (-1) THEN
|
|         ExRepD
|    THEN SubstFor r 0
|
|         THEN RWO "tc_unprime<" 0 THENA Auto
|
|         THEN BackThruSomeHyp THEN Auto
|
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. 1. P : Fmla
. 2. ds : Collection(dec())
. 3. da : Collection(SimpleType)
. 4. de : sig()
. 5. ∀r:rel(). r ∈ pred_unprime(P) ⇒ tc(r;ds;da;de)
. 6. r : rel()
. 7. r ∈ P
. ⊢  tc(r;ds;da;de)
. | by RWO "tc_unprime" 0 THENA Auto THEN BackThruSomeHyp
. |
. 1. P : Fmla
. 2. ds : Collection(dec())
. 3. da : Collection(SimpleType)
. 4. de : sig()
. 5. ∀r:rel(). r ∈ pred_unprime(P) ⇒ tc(r;ds;da;de)
. 6. r : rel()
. 7. r ∈ P
. ⊢  rel_unprime(r) ∈ pred_unprime(P)
.   by Unfold `pred_unprime` 0 THEN
.    RW ColMemberC 0
.
.         THEN InstConcl [r] THEN Auto
.
.         THEN Try (Fold `pred` 0 THEN Auto)
END
```