DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2018/11/11
Person Assigned	Don van Syckle
Submitter Name	Patrick A. Nast (patrick.nast@zeiss.com)
Submission Date	2018/03/09

Correction Number CP-1815
Log Summary: Add new Intraocular Lens Formulas and Lens Constants to DICOM Content Mapping Resource
Name of Standard PS3.16 2018a
Rationale for Correction: "CID 4236 IOL Calculation Formula" defines formulas used to calculate Intraocular Lenses (IOL). "CID 4237 Lens Constant Type" defines lens specific constants used for these IOL calculations. During the last years, new formulas and new lens constants have been defined to improve the patient's vision after a cataract surgery, which are not covered by current specification of CID 4236 and CID 4237. The scope of this proposal is to add code definitions for these new formulas to CID 4236 and lens constants to CID 4237.
Correction Wording:

In PS3.16, Annex B.1 modify CID 4236 to add codes for new IOL calculation formulas

CID 4236 IOL Calculation Formula

Resources:

HTML | FHIR JSON | FHIR XML | IHE SVS XML

Type:

Extensible

Version:

~~**20100623**~~**2018mmdd**

UID:

1.2.840.10008.6.1.882

Table CID 4236. IOL Calculation Formula

Coding Scheme Designator	Code Value	Code Meaning
DCM	111760	Haigis

DCM	111761	Haigis-L
DCM	111762	Holladay 1
DCM	111763	Holladay 2
DCM	111764	Hoffer Q
DCM	111765	Olsen
DCM	111766	SRKII
DCM	111767	SRK-T
DCM	**aaaaaa**	**Haigis Toric**
DCM	**bbbbbb**	**Haigis-L Toric**
DCM	**cccccc**	**Barrett Toric**
DCM	**dddddd**	**Barrett True-K**
DCM	**eeeeee**	**Barrett True-K Toric**
DCM	**ffffff**	**Barrett Universal II**

In PS3.16, Annex B.1 modify CID 4237 to add codes for new IOL lens constants

CID 4236 IOL Calculation Formula

Resources:

HTML | FHIR JSON | FHIR XML | IHE SVS XML

Type:

Extensible

Version:

~~**20100623**~~**2018mmdd**

UID:

1.2.840.10008.6.1.883

Table CID 4237. Lens Constant Type

Coding Scheme Designator	Code Value	Code Meaning
SRT	F-048FA	A-Constant
DCM	111768	ACD Constant
DCM	111769	Haigis a0
DCM	111770	Haigis a1
DCM	111771	Haigis a2
DCM	111772	Hoffer pACD Constant
DCM	111773	Surgeon Factor

DCM	gggggg	Barrett Lens Factor
DCM	hhhhhh	Barrett Design Factor

In PS 3.16, Annex D add to Table D-1

Code Value	Code Meaning	Definition	Notes
aaaaaa	Haigis Toric	The Haigis Toric IOL calculation formula. Haigis, Wolfgang. "Toric Iol Power Calculation." (2014). https://www.semanticscholar.org/paper/Toric-Iol-Power-Calculation-Haigis/033838182a57a1d2948ac7d3b115855e29d03fad	
bbbbbb	Haigis-L Toric	The Haigis-L Toric IOL calculation formula. Haigis W, Intraocular lens calculation after refractive surgery for myopia: Haigis-L formula. J Cataract Refract Surg, 2008. 34(10): 1658-63 doi:10.1016/j.jcrs.2008.06.029	
cccccc	Barrett Toric	The Barrett Toric IOL calculation formula. Abulafia, A., et al., Prediction of refractive outcomes with toric intraocular lens implantation. J Cataract Refract Surg, 2015. 41(5): p. 936-44. doi:10.1016/j.jcrs.2014.08.036	
dddddd	Barrett True-K	The Barrett True-K IOL calculation formula. Abulafia, A., et al., Accuracy of the Barrett True-K formula for intraocular lens power prediction after laser in situ keratomileusis or photorefractive keratectomy for myopia. J Cataract Refract Surg, 2016. 42(3): p. 363-9. doi:10.1016/j.jcrs.2015.11.039	
eeeeee	Barrett True-K Toric	The Barrett True-K Toric IOL calculation formula. Barrett G.D., Barrett True-K toric calculator. https://www.apacrs.org/TrueKToric105/T	

		rueKToric.aspx	
ffffff	**Barrett Universal II**	**The Barrett Universal II IOL calculation formula.** **Barrett, G.D., An improved universal theoretical formula for intraocular lens power prediction. J Cataract Refract Surg, 1993. 19: p. 713-720.** **doi:10.1016/S0886-3350(13)80339-2**	
…			
gggggg	**Barrett Lens Factor**	**The "Barrett Lens Factor" constant used in IOL calculation.**	
hhhhhh	**Barrett Design Factor**	**The "Barrett Design Factor" constant used in IOL calculation.**	