

## Appendix

### Members of the INCAPS Investigators Group

**Executive Committee:** A.J. Einstein (chair), T.N.B. Pascual (IAEA project lead), D. Paez (IAEA section head), M. Dondi (IAEA section head); (alphabetically) N. Better, S.E. Bouyoucef, G. Karthikeyan, R. Kashyap, V. Lele, V.P.C. Magboo, J.J. Mahmarian, J.B. Meeks, M. Mercuri, F. Mut, M.M. Rehani, J.V. Vitola.

**Regional Coordinators:** (alphabetically): E. Alexanderson (Latin America), A. Allam (Africa/Middle East), M.H. Al-Mallah (Middle East), N. Better (Oceania), S.E. Bouyoucef (Africa), H. Bom (East Asia), A. Flotats (Europe), S. Jerome (United States), P.A. Kaufmann (Europe), V. Lele (South Asia), O. Luxemburg (Israel), J. Mahmarian (North America), L.J. Shaw (North America), S.R. Underwood (United Kingdom), J. Vitola (Latin America).

**Members** (alphabetical order, by region). **Africa:** W. Amouri, H. Essabbah, S.S. Gassama, K.B. Makhdomi, G.I.E. El Mustapha, N. El Ouchdi, N. Qais, N. Soni, W. Vangu. **Asia:** R.M. Abazid, B. Adams, V. Agarwal, M.A. Alfeeli, N. Alnafisi, L. Bernabe, G.G. Bural, T. Chaiwatanarat, J.M. Chandraguptha, G.J. Cheon, I. Cho, A.S. Dogan, M. Eftekhari, A. Frenkel, I. Garty, S. George, P. Geramifar, H. Golan, S. Habib, R. Hussain, H. Im, H-J. Jeon, T. Kalawat, W.J. Kang, F. Keng, A. Klaipetch, P.G. Kumar, J. Lee, W.W. Lee, I. Lim, C.M.M. Macaisa, G. Malhotra, B.R. Mittal, M.H. Mohammad, P. Mohan, I.D. Mulyanto, D. Nariman, U.N. Nayak, K. Niaz, G. Nikolov, J.M. Obaldo, E. Ozturk, J.M. Park, S. Park, C.D. Patel, H.K. Phuong, A.P. Quinon, T.R. Rajini, Y. Saengsuda, J. Santiago, H.B. Sayman, A.S. Shinto, V. Sivasubramaniyan, M.H. Son, P. Sudhakar, G.M.S. Syed, N. Tamaki, K. Thamnirat, T. Thientunyakit, S. Thongmak, D.N. Velasco, A. Verma, U. Vutrapongwatana, Y. Wang, K.S. Won, Z. Yao, T. Yingsa-nga, R. Yudistiro, K.T. Yue, N. Zafirir. **Europe:** S.C. Adrian, D. Agostini, S. Aguadé, G. Armitage, M. Backlund, M. Backman, M. Baker, M.T. Balducci, C. Bavelaar, M. Berovic, F. Bertagna, R. Beuchel, A. Biggi, G. Bisi, R. Bonini, A. Bradley, L. Brudin, I. Bruno, E. Busnardo, R. Casoni, A. Choudhri, C. Cittanti, R. Clauss, D.C.

Costa, M. Costa, K. Dixon, M. Dziuk, N. Egelic, I. Eriksson, G. Fagioli, D.B. de Faria, L. Florimonte, A. Francini, M. French, E. Gallagher, I. Garai, O. Geatti, D. Genovesi, L. Gianolli, A. Gimelli, E. del Giudice, S. Halliwell, M.J. Hansson, C. Harrison, F. Homans, F. Horton, D. Jędrzejuk, J. Jogi, A. Johansen, H. Johansson, M. Kalnina, M. Kaminek, A. Kiss, M. Kobylecka, M. Kostkiewicz, J. Kropp, R. Kullenberg, T. Lahoutte, O. Lang, Y.H. Larsson, M. Lázár, L. Leccisotti, N. Leners, O. Lindner, R.W. Lipp, A. Maenhout, L. Maffioli, C. Marcassa, B. Martins, P. Marzullo, G. Medolago, C.G. Mendiguchía, S. Mirzaei, M. Mori, B. Nardi, S. Nazarenko, K. Nikoletic, R. Oleksa, T. Parviainen, J. Patrino, R. Peace, C. Pirich, H. Piwowarska-Bilska, S. Popa, V. Prakash, V. Pubul, L. Puklavec, S. Rac, M. Ratniece, S.A. Rogan, A. Romeo, M. Rossi, D. Ruiz, N. Sabharwal, B.G. Salobir, A.I. Santos, S. Saranovic, A. Sarkozi, R.P. Schneider, R. Sciagra, S. Scotti, Z. Servini, L.R. Setti, S-Å. Starck, D. Vajauskas, J. Veselý, A. Vieni, A. Vignati, I.M. Vito, K. Weiss, D. Wild, M. Zdraveska-Kochovska. **Latin America:** R.N. Agüero, N. Alvarado, C.M. Barral, M. Beretta, I. Berrocal, J.F. Batista Cuellar, T-M. Cabral Chang, L.O. Cabrera Rodríguez, J. Canessa, G. Castro Mora, A.C. Claudia, G.F. Clavelo, A.F. Cruz Júnior, F.F. Faccio, K.M. Fernández, J.R. Gomez Garibo, U. Gonzalez, P. González E., M.A. Guzzo, J. Jofre, M. Kapitán, G. Kempfer, J.L. Lopez, T. Massardo V., I. Medeiros Colaco, C.T. Mesquita, M. Montecinos, S. Neubauer, L.M. Pabon, A. Puente, L.M. Rochela Vazquez, J.A. Serna Macias, A.G. Silva Pino, F.Z. Tártari Huber, A.P. Tovar, L. Vargas, C. Wiefels. **North America:** A. Aljizeeri, R.J. Alvarez, D. Barger, W. Beardwood, J. Behrens, L. Brann, D. Brown, H. Carr, K. Churchwell, G.A. Comingore, J. Corbett, M. Costello, F. Cruz, T. Depinet, S. Dorbala, M. Earles, F.P. Esteves, E. Etherton, R.J. Fanning, Jr., J. Fornace, L. Franks, H. Gewirtz, K. Gulanchyn, C-L. Hannah, J. Hays, J. Hendrickson, J. Hester, K. Holmes, S. Jerome, A. Johnson, C. Jopek, H. Lewin, J. Lyons, C. Manley, J. Meden, S. Moore, W.H. Moore, V. Murthy, R. Nace, D. Neely, L. Nelson, O. Niedermaier, D. Rice, R. Rigs, K. Schiffer, E. Schockling, T. Schultz, T. Schumacker, B. Sheesley, A. Sheikh, B. Siegel, A.M. Slim, J. Smith, M. Szulc, N. Tanskersley, P. Tilkemeier, G.D. Valdez, R. Vrooman, D. Wawrowicz, D.E. Winchester. **Oceania:** A. Alcheikh, B. Allen, E. Atkins, J. Bevan, C. Bonomini, J. Christiansen, L. Clack, E. Craig, H. Dixon, I. Duncan, S. Fredericks, S. Gales, R. Hampson, T. Hanley, K. Hartcher, J. Hassall, B. Kelley, S. Kelly, T. Kidd, T. de Kort, G.

Larcos, W. Macdonald, C. McGrath, E. Murdoch, S. O'Malley, M. O'Rourke, M. Pack, R. Pearce, R. Praehofer, S. Ramsay, L. Scarlett, K. Smidt, F. Souvannavong, K. Taubman, G. Taylor, K. Tse, S. Unger, J. Weale.

**Supplemental Table 1.** Studies performed with an advanced camera in facilities reported use of CZT or PET technology.

	<b>Facilities (n)</b>	<b>Use of Adv. Camera</b>	<b>Dose reduced<sup>a</sup></b>	<b>Total Studies</b>
<b>CZT</b>	<b>23</b>	<b>782 (80%)</b>	<b>506 (65%)</b>	<b>972<sup>b</sup></b>
Asia	4	194 (67%)	85 (44%)	289
Europe	9	312 (91%)	185 (59%)	341
North America	5	163 (71%)	147 (90%)	228
Oceania	5	113 (100%)	89 (79%)	113
<b>PET</b>	<b>31</b>	<b>474 (34%)</b>	-	<b>1403<sup>c</sup></b>
Africa	1	6 (10%)	-	60
Asia	10	53 (17%)	-	305
Europe	10	52 (16%)	-	332
North America	10	363 (51%)	-	706

<sup>a</sup>Number of SPECT protocols using CZT cameras in which the administered activity of at least one dose was < 8 mCi (the lower limit of administered activity for standard dose SPECT protocols).

<sup>b</sup>Total number of SPECT studies performed at facilities reporting the use of CZT technology

<sup>c</sup>Total number of all studies performed at facilities reporting the use of PET technology

CZT = cadmium-zinc-telluride; PET = positron emission tomography

**Supplemental Table 2:** Comparison of ED between CT and line source AC for Tc-99m SPECT protocols.

Tc-99m Protocol	Number of facilities (n)		Effective dose (mSv)		<i>P</i>
	CT	Line source	CT	Line source	
<b>1-day SPECT</b>	<b>1101</b>	<b>265</b>	<b>8.9</b>	<b>10.4</b>	<b>&lt;0.001</b>
Rest only	57	3	4.1	6.1	0.044
Rest/Stress	515	191	10.6	11.6	<0.001
Stress only	181	29	3.3	2.8	0.008
Stress/Rest	347	42	10.0	10.5	0.104
<b>Multi-day SPECT</b>	<b>229</b>	<b>122</b>	<b>9.7</b>	<b>9.9</b>	<b>0.294</b>
Rest/Stress	89	50	11.2	9.0	<0.001
Stress/Rest	140	72	8.7	10.5	<0.001
<b>Total</b>	<b>1330</b>	<b>387</b>	<b>9.0</b>	<b>10.2</b>	<b>&lt;0.001</b>

AC = attenuation correction; CT = computed tomography; ED = effective dose; mSv = millisievert; Tc = technetium

