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Design and synthesis of nitrogen containing heterocyclic fragments via isocyanide chemistry and their biological evaluation as potential inhibitors of HIV-1 replication

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List of corrections from examiner 1

- All the typo and grammatical errors indicated in the copy of the thesis as suggested by examiner 1 were corrected.
- Page vi word chromatography was added in the abbreviation of LCMS and word spectroscopy was replaced by spectrometry after LCMS.
- Page vi word transform was inserted in the abbreviation of FTIR
- Page 2 Sentence 3 **the identification of HIV as the causative agent of** AIDS was inserted.
- Page 3 examiner ask if the page 3-7 are in different format " **they look different because they were printed in colour instead of black and white like other pages without pictures**" but other pages were printed in black and white
- Page 6 sentence 6 word **spectroscopic**" was inserted between NMR and studies as suggested.
- Page 11 Section 1.2 sentence 1 **65-73** range suggested for references, but could not be changed because referencing was conducted using footnote rather than doing it manually.
- Page 11 sentence 7 word "**available** "was inserted between commercially and source.
- Page 12 paragraph 2 sentence 2 word **spectrometry** was replaced by **spectroscopy** after Resonance
- Page 12 section 1.21. word **spectroscopy** was added in the title.
- Page 12 section 1.2.1 sentence 1 word **spectroscopy** was added between NMR and has
- Page 12 section 1.2.1 sentence 3 word **spectrosc**o**py** was added between NMR and involves.
- Page 12 section 1.2.1 sentence 5 word **spectroscopic** was added between NMR and signals.
- Page 12 section 1.2.1 sentence 6 **,** was added after dissociation and word **spectroscopic** was added between NMR and signals.
- Page 14 section 1.3 the **highlighted text** was addressed in paragraph 1 section 1.3.
- Page 15 scheme 1.1 oxidation state of compound 2 was checked and it is correct.
- Page 16 paragraph 1 sentence 2 **acidity of the** was added between the and α.
- Page 17 Section 1.2 sentence 1 **109-113** range suggested for references could not be changed because referencing was conducted using footnote rather than doing it manually.
- Page 18 paragraph 1 sentence 2 **have** was added between approaches and been.

- Page 18 paragraph 2 sentence 1 **is** was deleted between which and then.
- Page 18 Paragraph 1 Sentence 2 one full stop was deleted just after (Scheme 1.5).
- Page 18 Paragraph 3 Sentence 1 **an** was added before α-amino ketone.
- Page 19 Paragraph 1 Sentence 2 **is** was added between reaction and still while **a** was added between is and major.
- Page 19 Paragraph 2 Sentence 2 **and** was replaced by **or** between (^{t}BuOK) and sodium.
- Page 19 paragraph 2 Sentence 4 **a** was added between As and result.
- Page 21 paragraph 1 Sentence 1 **carbimidides** was replaced by **carbodiimides**.
- Page 21 section 1.3.3.2 Paragraph 1 Sentence 1 both **an** and **a** were added before oxygen and nitrogen.
- Page 22 paragraph 2 sentence 1 the was deleted between by and cyclohydration.
- Page 22 paragraph 1 sentence 2 an was added between when and aliphatic.
- Page 22 paragraph 1 sentence 3 be was added between may and overcome while to was replaced by in between chloride and the.
- Page 22 Pargraph3 the whole paragraph was modified as per suggested by examiner **In the Fischer oxazole synthesis, an aldehyde 37 reacts with cyanohydrins 38 in the presence of dry HCl using anhydrous ether as a solvent to give 2,5-disubstituted-1,3-oxazoles 39 as depicted in *Scheme 1.14*. The major drawback in this protocol is the formation of 2,5-diaryl-4-oxazolidones and oxazolid-4-ones as side products especially when an aliphatic aldehyde is used as a synthon. This problem may be overcome by using thionyl chloride in the reaction mixture**.
- Page 23 paragraph 2 sentence 1 **(I) iodide** was added after copper while, the numbering of the structure was changed from **2,5,4** to **2,5,-4'** and **bisoaxazole** was replaced by **bisoxazole.**
- Page 23 Section 1.3.3.3. Sentence 1 **148-152** range suggested for references could not be changed because referencing was conducted using footnote rather than doing it manually.
- Page 24 Paragraph 1 sentence 2 **as** was inserted between such and ethanol.
- Page 24 scheme 1.18 the size of the structures was addressed.
- Page 24 Section 1.3.3 Sentence 2 **(I) iodide** was added after copper and **conditions** was added between reaction and using.
- Page 25 Scheme 1.19 the numbering was addressed
- Page 26 scheme 1.20 **36** was changed to **50**

- Page 26 Paragraph 1 **then** was deleted and **, when** was added after which while the numbering of **3,2,4,5**- was changed to **2,3,4,5**
- Page 26 Section 1.3.4 sentence 1 **the** was deleted between with and Baylis.
- Page 26 Section 1.3.4 sentence 2 **in 2010,** was reshuffled to the beginning of the sentence.
- Page 26 Section 1.3.4 at the end of sentence 2 **error bookmark not defined** was removed.
- Page 27 Scheme 1.22 structure size was addressed.
- Page 28 Section 1.4 **s** was replaced by **blocks** between building and reported.
- Page 28 Section 1.4.1.1. Sentence 1 **of** was replaced by **for** between method and preparing while **a** was added between with and dehydrating
- Page 28 Section 1.4.1.1. Sentence 2 **system** was deleted between combination and of.
- Page 29 Scheme 1.25 size of the structure was sorted.
- Page 31 paragraph 1 Scheme 1.29 indeed the reaction does not involve Suzuki-coupling and the mistake was rectified by changing the paragraph to "**Crossley and Browne a regio-selective synthesis of iodoisoxazoles 70 in excellent yields through cycloaddition of alkynyliodide 68 to nitrile oxides 69 in the presence of 0.25 M aq. Na_2CO_3 using DME as solvent under heating for 24 hours as shown in *Scheme 1.29*.** and the Scheme 1.29 was changed to **Synthesis of iodoisoxazoles using an alkynyliodide cycloaddition strategy**.
- Page 31 paragraph 2 sentence 1 **the** was added between reported and synthesis.
- Page 31 Scheme 1.30 **substituted** was added between 3- and isoxazoles.
- Page 32 new paragraph 2 was created by breaking the sentence 4.
- Page 33 Figure 1.14 used was added between clinically and compounds while the structure R_1 group and NO_2 were sorted.
- Page 34 Paragraph 1 Sentence 4 **for** was added between allow and the, while **a** was added between of and new.
- Page 34 objective sentence 1 **the** was added between towards and generation.
- Page 34 objective 2 **evolution** was replaced by **evaluation**.
- Page 35 objective 5 **heterocycle** was added between nitrogen and containing.

- Page 36 main title **protein-protein interactions** were added after HIV-1.

- Page 37 scheme 3 2.1 comment Standard control method was used (in the CEM microwave standard control method the specified set temperature is held over a set time period, while the power applied is controlled by the instrument default settings)
- Page 39 Paragraph 1 sentence 1 spectroscopic was added between NMR and analysis while **the** was added between and & data
- Page 39 section 2.2.2. sentence 1 **3CvL** was change to match one in page 42.
- Page 40 Scheme 2.2 R" was replaced by R' while cylohexyl was replaced by cyclohexyl.
- Page 40 scheme 2.2 comments Methods C, D , E was used as continuation from scheme 2.1
- Page 42 section 2.2.2.2.1 sentence 2 comment: Standard control method was used and power applied is controlled by the instrument default settings Page 42 paragraph 2 last sentence was modified to **This can be attributed to the fact that the two electron-withdrawing halides cause a decrease in the nucleophilicity of the aniline NH_2.** to address question from examiner 1 and 2.
- Page 43 table 2.3. **3-cvL** was change to **3-CvL**.
- Page 43 section 2.2.2.2.2 sentence 2 **in order to assess the effect of solvent on the reaction yields, as per conditions illustrated in *Scheme 2.3***. was added
- Page 44 sentence 1 **spectroscopic** was added between NMR and analysis
- Page 44 sentence 4 **proton** was change to **^{1}H** for consistence**.**
- Page 45 paragraph 3 sentence 1 **the mild conditions in protic solvents using *t*-$BuNH_2$ or K_2CO_3** as a base was added as per suggested
- Page 46 section 2.2.2.3. sentence 1 **synthesis of** was deleted at the beginning of the sentence while **afforded** was replaced by **were isolated in** between in and fragments
- Page 46 section 2.2.2.3 last sentence **of** was added between presence and of these
- Page 46 section 2.2.2.4. Paragraph 2 sentence 1 spectroscopy was replaced by spectrometry.
- Page 46 section 2.2.2.4. Paragraph 2 sentence 2 **is** was replaced by **was** between detector and used.
- Page 48 paragraph 1 sentence 1 spacing between above. and reference was addressed.
- Page 48 section 2.2.3. sentence 1 comma was added between assay and in.
- Page 49 Table 2.5 positive and negative controls were added.
- Page 55 paragraph 1 sentence 3 **be of help in the facilitation of** was replaced by **facilitate** between could and the
- Page 57 paragraph 1 sentence 1 **spectroscopic** was added between NMR and analysis.

- Page 57 paragraph 2 sentence 3 **spectroscopy** was added after NMR.
- Page 58 sentence 1 **albeit** was replaced by **in spite of.**
- Page 58 sentence 2 **proton** was replaced by **^{1}H** and **spectra** was added after NMR while **have one** between compounds and geometrical was replaced by **are isolated as single**.
- Page 59 Scheme 2.8 Structure alignment was addressed and **^{t}BU** was replaced by **^{t}Bu**.
- Page 59 sentence 2 non breaking space was used after at.
- Page 60 paragraph 1 sentence 2 non breaking space was used after at.
- Page 63 Scheme 2.10 structure alignment was addressed.
- Page 64 sentence 1 **spectroscopic** was added between NMR and analysis while **spectroscopy** was added after FTIR.
- Page 64 sentence 2 **signals due to** were added between stretch and the.
- Page 64 Table 2.13 was bolded.
- Page 65 sentence 1 **ring** was added between imidazole and using.
- Page 66 paragraph 3 sentence 1 **a** was added between have and significant.
- Page 67 spacing in section 2.3.3.2 was addressed.
- Page 69 footer was address.
- Page 69 spacing between < and 87a was addressed.
- Page 70 sentence 1spacing between Ala and 169 was addressed.
- Page 71-75 footer was address.
- Page 79 paragraph 1 sentence 3 **the** was added between of and compound.
- Page 79 paragraph 2 sentence 4 **spectroscopy** was added after NMR
- Page 79 last paragraph sentence 3 **the** was deleted between than and 50% while **benchmark** was replaced by **in the AlphaScreen** assay
- Page 80 paragraph 1 sentence 3 **also** was added between they and did
- Page 80 paragraph 2 sentence 2 **a** was added between in and direct.
- Page 80 paragraph 3 sentence 3 **and** was deleted and **evaluated** was added between been and for.
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- Page 83 sentence 2 **each** was added after 97i.
- Page 83 Paragraph 1 Sentence 3 spectroscopic was added between NMR and data.
- Page 83 Paragraph 2 sentence 2 was rephrased as **An alternative explanation could be that the nucleophilic protic solvent MeOH may assist in the elimination of the tosyl group.** to address suggestion made by examiner.
- Page 84 yields on the Table 3.3 were added for comparison.

- Page 85 section 3.2.4. sentence 1 **spectroscopic** was added between NMR and analysis.
- Page 86 sentence 1 **proton** was replaced by ^{1}**H**
- Page 86 section 3.2.5. sentence 1 **spectroscopy** was replaced by **spectrometry** after mass.
- Page 87 Table 3.5 positive and negative controls were added.
- Page 89 scheme 3.3 **Integration of carboxamide moiety on the 5-aryl-1,3-oxazole fragments** was as description of the scheme.
- Page 91 paragraph 2 sentence 5 **the** was added between showed and disappearance while **signals due to the** was added between the and ethyl.
- Page 92 paragraph 2 sentence 3 **in each case** was added between product and was while **the** was added between in and ^{13}C.
- Page 92 Paragraph 2 sentence 4 **spectroscopic** was added between FTIR and dat.
- Page 93 scheme 3.6 **attempt** was replaced by **attempted.**
- Page 95 section 3.3.1.4. sentence 1 **our** was added between of and dihydro-carboxamides while **a previously** was replaced by **this** between using and reported while with **$BrCCl_3$ and DBU** was deleted.
- Page 96 section 3.3.2.2. in the heading 108 was replaced by 109
- Page 96 section 3.3.2.2. sentence 1 108 was replaced by 109 after carboxylates and is
- Page 96 section 3.3.2.2. sentence 2 commas were added between which and upon as well as between protonation and affords.
- Page 98 paragraph 1 sentence 1 **spectroscopic** was added between NMR and analysis.
- Page 98 paragraph 2 sentence 3 **spectroscopy** was added after NMR while **signals arising from** were added between the and protons.
- Page 99 section 3.3.2.3. paragraph 1 sentence 2 **proton** between the and NMR was replaced by ^{1}**H**.
- Page 100 section 3.3.2.5. in the heading **spectroscopic** was added between NMR and analysis.
- Page 101 table 3.9 **m** was added between their and sigma.
- Page 102 comment: no there ms/ms fragmentation has not been previously reported.
- Page 105 sentence 1 **the** was added between determine and percentage.
- Page 105 sentence 12 **is** was deleted between it and shows.
- Page 106 sentence 1 other was moved between the and phenyl.
- Page 107 section 3.3.5 sentence 1 **decent** was replaced by **acceptance**.
- Page 108 paragraph 1 sentence 2 **100b** was replaced by **100h**.

- Page 108 paragraph 2 sentence 1 **100h** was replaced by **100b**.
- Page 108 paragraph 3 sentence 2 is was deleted between group and shows.
- Page 109 footer was addressed and **a** was deleted between through and making while **of** was inserted between binding and the in sentence 1.
- Page 109 sentence 2 **of** was inserted between binding and the
- Page 112 paragraph 1 sentence 2 **the** was added between of and aniline.
- Page 112 paragraph 2 sentence 3 **that** was inserted between showed and both while the was inserted between within and HIV-1.
- Page 112 paragraph 2 in sentence 4 **the** was added between comma and *para*-methoxy while **was** was inserted between ring and showed.
- Page 114 italics for L-alanine and D-leucine was addressed.
- Page 114 section 4.2.1. paragraph 2 sentence 3 spacing between HCl and /EtOH was addressed.
- Page 114 spacing between references in the last sentence of paragraph 2 section 4.2.1. was addressed.
- Page 115 paragraph 2 sentence 1 word **spectroscopic** was added between NMR and analysis.
- Page 116 Scheme 4.3 missing **7g R= 3-OH,4-Ome** was inserted
- Page 116 section 4.2.2. the whole paragraph was modified to **Walton *et al.* described the reaction of various aldehydes with esterified amino acid salts using Et_3N as a base in the presence of $MgSO_4$ in DCM at room temperature to afford the corresponding ethyl (*E*)-2-{(arylidene)amino}acetates in quantitative yields. Inspired by this protocol, our free amino ethyl esters 115a-c were then exposed to the condensation reaction conditions by reacting with various benzaldehydes 7a-h in the presence of $MgSO_4$ using DCM as solvent at room temperature for 16 hours (*see Table 4.3*). Work up furnished the desired ethyl 2-(arylideneamino)acyl intermediates (116a-h, 117a-d and 118a-c) in yields of up to 96%. The yields of the products obtained (96% for 116h and 92% for 117d) were considerable improvements over those reported by López-Pérez *et al.* (81% for 116h and 87% for 117d). Compounds 116a-h, 117a-d and 118a-c were used in the next stage without further purification.**
- Page 117 sentence 1 word **spectroscopy** was inserted after FTIR.
- Page 117 sentence 3 word **proton** was replaced by **^{1}H** between all and NMR.

- Page 118 paragraph 1sentence 1 words **signals from the** were inserted before methine while the italic for L-alanine was addressed and of was replaced by **due to** between quartet and the.
- Page 118 section 4.2.3. paragraph 2 sentence 6 word **proton** was replaced by **^{1}H** between however, and NMR.
- Page 118 section 4.2.3. paragraph 2 sentence 7 116d was placed after intermediate.
- Page 119 comment in the scheme 4.4 was addressed.
- Page 119 sentence 6 **spectroscopy** was inserted after NMR.
- Page 119 sentence 7 **proton** was replaced by **^{1}H** between the and NMR.
- Page 121 sentence 4 brackets were check and rectified while the italics in L-alanine was addressed in the same sentence.
- Page 121 at the end of sentence 5 **difficult** was replaced by **were not obtained**.
- Page 123 section 4.2.4.1. **spectroscopy** was inserted in the heading .
- Page 123 sentence 5 words **as a signal** were inserted between resonates and at.
- Page 123 sentence 6 words **as a signal** were inserted between appears and at while the comma after whereas was deleted.
- Page 123 sentence 7 word **emerge** was replaced by **give rise to signals** were added between *meta*-position and at
- Page 124 Table 4.6 close bracket boldness was address and **m** was added before sigma.
- Page 126 spacing at the end of sentence 3 was addressed.
- Page 129 paragraph 2 sentence 1 **and** was added between FTIR and NMR while **spectroscopy** added after NMR and **spectrometry** were inserted after mass.
- Page 129 scheme 4.6 **method A** and **B** under structure 123 were added
- Page 131 sentence 1 words **of signals due to** were inserted between disappearance and the ethyl
- Page 132 Scheme 4.8 **Method C** and **Method D** were inserted under compound 125.
- Page 132 sentence 2 the brackets issues was addressed.
- Page 133 sentence 1 **spectroscopic** was added between NMR and analysis.
- Page 134 sentence 2 **spectrum** was added between NMR and of while **a singlet signal** were added between resonates and downfield.
- Page 134 paragraph 2 the comma between two references was addressed.
- Page 135 sentence 1 and 2 **proton** was replaced by **^{1}H** between the and NMR
- Page 135 paragraph 1 sentence 4 **spectroscopic** was inserted after NMR.
- Page 138 table 4.11 R' where added.

- Page 140 IC_{50} of the control compound was not conducted due to the small amount of BST-2 available.
- Page 141 paragraph 4 sentence 1 words in our **BST-2-vpu ELISA** assay were inserted.
- Page 144 the footer issue was addressed
- Page 147 sentence 1 and was inserted between NMR & and while **spectroscopy** was added after NMR.
- Page 149 scheme 4.11 comment was address.
- Page 150 section 4.3.3. sentence 1 **a** was deleted between to and families.
- Page 151 end of paragraph 1 one full stop was deleted.
- Page 151 section 4.3..4 spacing between studio and TM was address.
- Page 154 paragraph 2 sentence 1 a was deleted between similar and mode.
- Page 155 footer issue was addressed.
- Page 156 footer issue was addressed and italics between L-alanine and D-leucine was addressed as well.
- Page 158 paragraph 2 sentence 2 **internal** was replaced by **intestinal** between human and absorption.
- Page 158 paragraph 3 at the end of sentence 2 **dihalide group** was replaced by **halides**.
- Page 159 paragraph 2 incredence was replaced by credence.
- Page 160 sentence 2 **has** was change to **have**.
- Page 160 sentence 3 **consideration** was inserted between and our as per suggested.
- Page 162 paragraph 1 comment. The source of H^+ is form the deprotonation of chloroform
- Page 162 paragraph 1 sentence 1 **it** was replaced by **is** between and thought while **a** between involve and deprotonation was deleted.
- Page 162 paragraph 2 sentence 1 **analytically** was deleted and **spectroscopic** was inserted after FTIR.
- Page 162 sentence 2 **as case as** was replaced by **as racemates**.
- Page 162 sentence 3 132c was deleted between compound and was.
- Page 162 sentence 3 **a signal** before the hydroxyl and **as a signal before** between resonate and at were inserted in the same sentence.
- Page 164 paragraph 2 sentence 1 word s**pectroscopy** was added.
- Page 165 section 5.2.1.3. paragraph 1 was modified as suggested by examiner 3.
- Page 166 sentence 1 **spectroscopy** was added after NMR was added.

- Page 166 sentence 2 **spectroscopic** was added between NMR and analysis while **diastereomeric** was replaced by **a** and **of geometric isomers** was inserted between mixture and in. Whereas **were** was replace by **was** between spectra and carried in the same sentence.
- Page 166 sentence 3 **proton** was replace by **^{1}H** while spectrum was added after NMR , while **determined** deleted between 129b and in.
- Page 166 sentence 4 **as peaks** between isomers and at as well as **as signals** between resonated and at were added in the same sentence.
- Page 167 sentence 4 language was corrected
- Page 168 paragraph 1 sentence 1 **spectroscopic** and **amide** were added in the same sentence
- Page 168 paragraph 1sentence 3 comma between spectrum and of was deleted.
- Page 168 paragraph 1 sentence 4 **as a signal** was inserted between resonates and appears.
- Page 168 paragraph 1sentence 5 registered was replaced by showed between 139d and the.
- Page 168 paragraph 1sentence 6 **as a signal** were added between emerged and at.
- Page 168 paragraph 2 sentence 2 good was inserted between in and yields.
- Page 169 sentence 2 **signals due to** between of and both were added.
- Page 169 sentence 3 **signal for the** were added between the and aldehyde while **signal arising from** were added between of and an in the same sentence.
- Page 169 sentence 5 number **34** was deleted between 129.4 and and.
- Page 169 sentence 6 **signals due to** were inserted between of and the.
- Page 170 sentence 2 to comma in 5.9 was added.
- Page 170 sentence 4 **as** was replaced by **was** between 129c and fully while **a** was inserted between of and new. Whereas **but** was replaced by **comma although** in the same sentence.
- Page 170 sentence 5 **a** was inserted between in and yield.
- Page 170 sentence 6 **to** was added between due and the
- Page 170 sentence 8 **usage** was replaced by **use** between the and of.
- Page 171 sentence 1 **of** was deleted between exploring and the
- Page 173 sentence 2 **resulted** was replaced by **resulting**.
- Page 173 sentence 4 to was added between similar and those.
- Page 174 section 5.2.5. was made bold.

- Page 174 section 5.2.5 sentence 2 **proton** was replaced by **^{1}H** between the and NMR while **as a triplet** was moved between resonates and at.
- Page 174 section 5.2.5 sentence 3 **proton** was replaced by **^{1}H** between the and NMR while spectrum was added between NMR and was.
- Page 174 section 5.2.5 sentence 7 **stretching band** was added between NH and between.
- Page 175 paragraph 1 sentence 2 **was** replaced by **were** between 129 and required.
- Page 175 paragraph 1 sentence 3 **scaffolds** was replaced by **compounds** between arylisoxazole and were while **of these (139a-e)** replaces scaffolds between 5 and were.
- Page 175 sentence 4 compounds replace scaffolds between 10 and were.
- Page 176 sentence 1 **144d** replaced **144b**.
- Page 179 section 6.2 sentence 1 line 6 **inhibition** was change to **inhibitory**
- Page 179 section 6.2 sentence 2 **the** was added between at and university and also between of and Witwatersrand.
- Page 179 section 6.2 sentence 3 **value** was added between MIC and of while **antibacterials** was added between good and also **be** was replaced by **represent**.
- Page 182 table 6.1 Nystastin was replaced by Nystatin.
- Page 182 **value** was added between MIC and of in line 2, 3, 9 and 13.
- Page 183 **value** was added between MIC and of in line 2.
- Page 183 section 6.2.2. **value** was added between MIC and of in line 7 and 8.
- Page 185 table 6.2 Nystastin was replaced by Nystatin.
- Page 187 table 6.1 Nystastin was replaced by Nystatin.
- Page 188 **value** was added between MIC and of in line 4 paragraph 1.
- Page 188 **value** was added between MIC and of in sentence 1 paragraph 2
- Page 188 **values** was added between MIC and as in sentence 2 paragraph 2 while a was deleted between demonstrated and marginal in the same sentence.
- Page 188 section 6.2.4. sentence 2 **were** was used instead of **was** between compounds and active.
- Page 189 Table 6.4 Nystastin was replaced by Nystatin.
- Page 189 section 6.3 sentence 2 **have decent** was replaced by **displaying promising** between to and antimicrobial
- Page 189 section 6.3 sentence 3 alteration was deleted between through and synthetic.
- Page 190 the whole of chapter 7 was revised as suggested by examiner 2 so the suggestion made by examiner 1 were invalid.

- Page 354 reference 12 and 12 were corrected as per suggested
- Page 355 reference 41 was corrected as per suggested
- Page 336 reference 50 was corrected as per suggested
- Page 357 reference 71 was corrected as per suggested
- Page 358 reference 88 was corrected as per suggested
- Page 353 reference 97, 105, 115 and 117 were corrected as per suggested
- Page 360 references 127, 134 and 135 were addressed as per suggested
- Page 362 references 176, 178, 179 and 181 were addressed as per suggested
- Page 365 references 205 and 206 were corrected as per suggested
- Page 364 references 213, 221, 222 and 223 were corrected as per suggested
- Page 366 reference 258, 260 and 262 was corrected as per suggested
- Page 367 285 reference 285 was addressed
- Page 368 290, 303 and 304 references were addressed
- Page 369 reference 315, 317 and 333 references were addressed
- Page 370 reference 35 was corrected
- Page 371 references 361, 362, 363, 369 and 370 were addressed as per suggested