The Corpus of Greek Medical Papyri Online and the Digital Edition of Ancient Documents

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The Corpus of Greek Medical Papyri Online and the Digital Edition of Ancient Documents*

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πολλὰ γὰρ καὶ ἰατρῶν ἐστι συγγράμματα (Socrates ap. Xen. Mem. 4.2.10. 5)

1. Presentation of the project

The first section of this contribution is devoted to a general presentation of the project mentioned in the title, its history, its purposes, and its current results. The Project "Corpus of Greek Medical Papyri Online" (acronym from the Italian version is CPGM) is aimed at creating a textual database of the Greek papyri dealing with medicine, complete with introduction, critical apparatus, commentary, and translation, connected to a lexicographical databank of their own technical terms. It is housed at the University of Parma (Italy) and was directed (until November 2016) by Professor Isabella Andorlini; the core team has always been composed by a small group of researchers holding PhD or post-doc positions at Parma, but the work took advantage also of a roster of guest collaborators² as well as students³ from the University of Parma, who contributed to the digital encoding of the texts during several workshops and seminars organized over the past years.

The project is deeply rooted in Professor Andorlini's well-known, long-standing interest in medical papyri;⁴ her original idea to collect the medical texts in a specific corpus was at first conceived of as a series of traditional paper editions,⁵ then she became attracted to the possibilities offered by the developments of the digital tools.⁶ In fact, initially no textual databank hosted the entire corpus of the Greek medical papyri, due to their borderline nature that ranges from literary texts (treatises by both known and unknown authors) to technical handbooks, school manuals and collections of recipes, to the proper documentary texts (prescriptions or letters containing medical references). Thus most of them fall into that

^{*} The present contribution falls into the DIGMEDTEXT project (ERC-2013-AdG no. 339828) funded by the European Research Council at the University of Parma (Principal Investigator: Prof. Isabella Andorlini). See http://www.papirologia.unipr.it/ERC.

¹ The latest team has been composed –beside Dr Nicola Reggiani, who succeeded Prof. Andorlini in the general coordination of the project– by Dr Francesca Bertonazzi, Dr Isabella Bonati, Dr Margherita Centenari, and Dr Luca Iori. Former collaborators have been Dr Andrea Bernini (now at Naples) and Giulia Ghiretti, MA.

² I take the occasion to thank Andrea Bernier (Parma), Nicoletta Canzio (Cassino), Gianmario Cattaneo (Turin), Vincenzo Damiani (Würzburg), Angelica De Gianni (Naples), Maria Elena Galaverna (Parma), Maddalena Mauriello (Naples), Anna Monte (Berlin), Stefano Napolitano (Naples), Federica Nicolardi (Naples), Fabian Reiter (Trier), and Letizia Rivera (Turin) for their active collaboration.

³ E. Angolani, C. Baccaro, M. Blanco, C. Bottioni, E.I. Breviglieri, A. Brunazzi, M. Catania, M. Conti, C.M. Ferrari, C. Foti, D. Gaetano, S.L. Giacchi, F. Giraldi, M. Guareschi, S. Haji Mohamed, P. Lillo, F. Marazzini, E. Mazzetti, L. Mazzolari, B. Nava, N. Pajares Collado, C. Quartarone, V. Riccò, L. Rizzardi, G. Saccani, E. Spedicato. Particular thanks go to Marcel Moser (Erasmus exchange student from the University of Würzburg) who professionally edited several medical texts in the framework of the DIGMEDTEXT project.

⁴ Cf. Andorlini (2018); Reggiani (2017b); (2018a).

⁵ Cf. Andorlini (1997a) and the subsequent, well-known Greek Medical Papyri series.

⁶ Cf. Andorlini (2018) I 363-375 and 380-390.

uneasy category usually labelled as 'paraliterary' or 'subliterary'; nonetheless, they are of the utmost interest from many viewpoints: for papyrology and for the history of medicine, just to mention the most obvious ones.⁷ Therefore, our project intended to complete and integrate the existing databases by providing texts that are updated –and constantly updatable, according to the SoSOL philosophy–, fully searchable, and complete, in that they are based on the collation of all the possible extant paper editions of each papyrus.

From 2010 to 2011, we performed a test by digitizing the Ammon archive (P.Ammon II). The 29 documents pertaining to the archive of the famous *advocatus* of Panopolis are an example of quasi-paraliterary texts with a certain degree of complexity and indeed represented a wonderful test case. In 2011, the first approaches to the digitization of the medical papyri were made: 16 specimina were encoded in Leiden+ on the SoSOL platform (Papyri.info), followed by the entire text of the Michigan medical codex (P.Mich. XVII 758) with the help of some students. From 2011 to 2012 the "CPGM project" joined the third phase of the "Integrating Digital Papyrology project" (IDP3),8 conducted by Roger Bagnall and Josh Sosin, who created a special place within the SoSOL platform, called the "ParmaMed Community", to allow us to play around with our texts. Thirty more texts were entered with the usual collaboration of some students of Papyrology. At the end of 2012, in collaboration with Professor Anastasia Maravela (University of Oslo), we started the creation of a lexicographical database of Greek medical technical terms to be connected to the texts (the project "Medicalia Online", which is described by Dr Isabella Bonati in these same Proceedings). In 2013 Professor Andorlini obtained an Advanced Grant of the European Research Council (7th Framework Programme, Programme "Ideas"), under which from 2014 to the end of 2016 we undertook the project "Online Humanities Scholarship: A Digital Medical Library based on Ancient Texts" (acronym DIGMEDTEXT). In the meantime, the "Digital Corpus of Literary Papyri" project (DCLP) was launched,9 and the Parma medical project became one of the first partners for both entering texts and discussing new encoding strategies.

The current state of the art is showed by the tables at the end (figures 2-7; more detailed and updated online at https://goo.gl/ZBbHkp, where hyperlinks to each digital edition and further information are provided): of the ca. 300 medical texts published so far, ¹⁰ 281 have been completely encoded in the ParmaMed SoSOL community. Most of them have already been moved to the DCLP platform and are publicly available, and just (comparatively) few are still on hold for a final check; a dozen texts, paradoxically, could not be moved because they were considered 'documentary' and for the moment they lack XML support in the DCLP GitHub repository. A full insight of a typical CPGM digital item is given by Dr Francesca Bertonazzi in these same Proceedings; I now move to a second section of my presentation, devoted to the particular technical requirements of digitizing medical papyri.

2. Special technical needs of a special technical corpus.

Medical papyri are mostly technical texts: they conveyed technical knowledge, i.e. theoretical and practical information at the same time —a knowledge that is, in turn, mirrored and refracted in the different written genres encompassed by the corpus.¹¹ The importance of

⁷ Cf. Andorlini (1993).

⁸ Cf. Reggiani (2017a) 232-250.

⁹ Cf. http://isaw.nyu.edu/news/digital-literary-papyri and Ast / Essler (2018).

¹⁰ The catalogues by Marganne (1981a), Andorlini (1993), and Marganne / Mertens (1997) are snapshots of the past state of the art; one should refer to LDAB and M-P³ for more updated counts.

¹¹ Cf. Reggiani (forthcoming a).

medical technical skills is apparent, and not only for health reasons (think of Galen's instructions to the patients so that they can choose the best doctor after an enquiry about his skills): 12 one might recall P.Oxy. I 40 (+ BL I 312, V 74, VI 95; Oxyrhynchus, 2nd cent. CE), a copy of the report of a court judgement where a public doctor claims for immunity from some liturgies, and the judge, after a rather witty remark, requests a scientific proof of his assertion. 13 The importance of written text for this education is stressed as earlier as in the Hippocratic corpus: «I consider the ability to evaluate correctly what has been written as an important part of the art» -says the author of the Epidemics- «He who has knowledge of it and knows how to use it will not commit, in my opinion, serious errors in the professional practice» (Epid. 3.16 = 3.10.7-8 L.). In fact, the transmission of this knowledge was carefully carried out through a specialized education, which was based on oral teachings later entrusted to written form. In the introduction to the treatise On his own books, Galen himself explains how in the context of the oral lesson one used to take written notes, thence moving to the publication of *memoranda*, the *hypomnemata* of the lessons heard. 14 Stemming from both the knowledge of oral teaching and the know-how of practical records, medical writing is not a fixed book but a tool in flux: the older treatises are commented upon, corrected, updated; the collections of personal annotations on clinical cases, therapies or remedies are constantly updated with notes and corrections based on the practice; prescriptions are transcribed, gathered and passed down; handbooks of different typologies are used to teach again... retaining in written form every stage of transmission and use. 15 Accordingly, the letters that constitute the main text of the written document are interwoven with a large variety of paratextual devices, which make a contribution to articulating an expressive network that is essential to the medical writing itself, to its transmission, to its learning, and to its practical use: therefore, they deserve particularly careful consideration. Critical and diacritical marks, punctuation, graphical and layout features, technical terms and formulae, literary or subliterary references or echoes, marginal annotations –to cite the most outstanding ones– form a complex interplay that cannot be separated from the text itself, nor -even more- ignored, without compromising the correct interpretation of the evidence. The new technological horizons opened by the development of electronic databanks and platforms offered a suitable way of representation and in-depth analysis of such features, but also raised discussion about the best way to encode these complex texts, since we had as a starting point a powerful platform -Papyri.info- designed in the first instance to host documentary papyri, with partially different needs.¹⁶

A couple of meaningful cases will now be considered. The well-known typology of the questionnaire, or catechism (*erotapokrisis*), provides medical notions in a dialogue format, where a question about theoretical definitions or practical procedures is followed by a more or less detailed answer.¹⁷ Its use as a handbook, a reference tool for the doctors' preparation, is clear also from the complex set of devices employed to highlight the articulation of the text: questions are very often indented in *eisthesis*, and further marked with *paragraphoi*, line fillers or other lectional marks that introduce the answers as well. This 'mise en page' reflects the central role played by the question-and-answer structure of the didactical tool:¹⁸ it is therefore unconceivable to encode such texts without paying attention to their paratextual aspects. This of course raises some issues, like how to represent the *eisthesis*, a textual feature

¹² Cf. Nutton (1990).

¹³ On official examinations of physicians see Reggiani (forthcoming b).

¹⁴ Cf. Nutton (1972); Nieddu (1992) 555-567; Andorlini (2018) I 297.

¹⁵ Cf. Andorlini (2018) vol. 1, 294-317; Reggiani (forthcoming a); (forthcoming c).

¹⁶ Cf. Reggiani (2017a) 202-254 passim.

¹⁷ Cf. Reggiani (2016) with earlier bibliography.

¹⁸ Cf. Andorlini (2018) vol. 1, 286-293.

that has not been taken into consideration for documentary papyri so far. It is tempting, at a first stage, to equate it to a vacat and therefore to encode it like that. However, theoretically, we are not dealing with a blank space, but with an indention of the line with the purpose of putting a particular stress on it. We must be aware of the fact that when we encode a text digitally we do not (or not only) aim at creating a lovely display output, but above all at annotating the text with semantic information. 19 Each Leiden+ tag, as well as its underlying XML code, represents a papyrological feature: when we underdot an *alpha* in the Editor ($\alpha =$ <ur><unclear>α</unclear>) we primarily want not to draw an alpha with a dot below, but to represent an unclear character that may be read as *alpha*. Similarly, when we encode a vacat (e.g. vac.? = <space extent="unknown" unit="character"/>, we intend to describe a certain extent of space intentionally left without characters. The eisthesis is something different: it is a displacement of the line beginning to stress its relevance.²⁰ Its specular counterpart, the ekthesis, makes the picture clearer: by no means can it be indicated by creating weird virtual vacats at the beginning of the surrounding lines. The current suggestion is that it be encoded as an attribute of the line: <lb n="1" rend="indent"/>, which in Leiden+ appears as (1, indent) -the same way marginal annotations are tagged.²¹ This seems to work fine, and is now fully supported by the platform even in the HTML output display, which renders the layout correctly. However, a further problem arises if we consider that in some catechisms questions do not start in a new line, but on the same line as the end of the previous answers, after a blank space that cannot be considered as a vacat for the same reasons as above. In this case, if we tagged the entire line as «eisthesis» we would not represent the situation correctly. A possible solution might be to tag the question phrase with the TEI/EpiDoc XML <hi> element, which is used to sign «highlighted characters or words», «with a rend attribute specifying the kind of highlighting». ²² In our case, the attribute would be «eisthesis» (i.e. <hi rend="eisthesis">...</hi>, which is not supported by SoSOL currently).²³

The picture is even more complex if we turn to recipes and collections of recipes, where an entire set of textual and paratextual features contributes to make up what Isabella Andorlini described as a «graphical and expressive jargon» of medical prescription.²⁴ We find not only layout devices like eisthesis and ekthesis again, but also sets of graphical marks aimed at preserving the aspect of fragment that prescriptions bear.²⁵ For instance, paragraphoi, coronides, diplai obelismenai, and any other paratextual devices meant to separate text blocks as «milestones» <milestone encoded (XML rend="paragraphos" unit="undefined"/>), which in Leiden+ are rendered by sequences of hyphens or other typographical signs (---- or the like) placed between two lines. This is fine, until we meet with *paragraphoi* that separate two lines while the real break (i.e. the 'milestone') falls within the preceding or the following line (e.g., in P.Oslo inv. 1576v): it is quite clear that the line unit loses relevance when one deals with technical texts stemming from oral, or oral-like, transmission. Abbreviations are another painful chapter. Medical prescriptions make an extensive use of abbreviated words; given their technical nature, it would be extremely useful to understand if there is any pattern behind them. As of now, abbreviations are to be encoded in the same way as the documentary papyri, that is according to the type of expansion – known or unknown, distinguished on the ground of the XML syntax. Any attempt to encode

¹⁹ Cf. Reggiani (2017a) 232-241.

²⁰ On the ecdotic relevance of line displacement in the system of the margins of the Greek literary papyri see Savignago (2008).

²¹ See the Leiden+ guidelines at http://papyri.info/docs/leiden plus. For *ekthesis*, the term 'outdent' is used.

²² Cf. http://www.stoa.org/epidoc/gl/latest/trans-charactershighlighted.html.

²³ Cf. Reggiani (forthcoming d).

²⁴ Andorlini (2018) vol. 1, 15-36.

²⁵ Cf. Reggiani (forthcoming c).

the type of abbreviation (e.g. by raised letter or by overline) is currently deprecated. We strongly hope that in the future this level of annotation may be taken into consideration: our tentative proposals, listed at http://www.papirologia.unipr.it/ERC/cpgm.html#markup, are based on a preliminary survey conducted on the different abbreviation typologies in the Greek medical papyri and on the TEI/EpiDoc XML guidelines²⁶.

These sample considerations, provided *exempli gratia* just to show how complex is to find out the best way to encode properly a technical text such as a medical writing,²⁷ are fundamental to develop the concept of digital critical edition as outlined in the following, closing section.

3. The contribution of medical papyri to the concept of digital critical edition of ancient documents.

The so-called paraliterary texts—like the catechisms and the prescriptions described above—are further characterized by intertextual and transtextual connections: references, quotations, more or less literal parallels, are another key to understand and contextualize the matter at the best. The recipes, and their collections known as *receptaria*, find inspiration in the pharmacological treatises and are further enriched by the doctors' personal practice and by references and quotations from different medical sources; the questionnaires are connected to the literary tradition of the Definitiones medicae. These are by no means stemmatological relationships between ascendants and descendants: it is a fluid knowledge under continuous changes, updates, adaptations, much influenced by oral teaching and actual practice. Rigid definitions of philological variants (for which a new tag |var| has been envisaged on the basis of the extant TEI/EpiDoc XML syntax) do not really apply, as well as the treatment of linguistic variants can be more complex than the simple application of a regularization tag (|reg|) which categorizes a standard (not to say correct) and a deviant version of a word.²⁸

P.Tebt. II 272 verso (late 2nd cent. CE) is a fragment of Herodotus Medicus' De Remediis, describing the symptomatology of thirst and its treatment; the text corresponds in part to an excerpt preserved with Oribasius (Coll.Med. V 30. 6-7 = CMG VI 1. 1 Raeder). Above line 5, where the text reads $\alpha i \tau i \alpha i \tau \eta c$ $\pi \rho o c \phi o \rho \alpha c$ introducing the different reasons for giving the sick something to drink, the scribe adds two groups of three letters between dots: *τῶν* above $\tau \hat{\eta} \varsigma$, and * $\rho \hat{\omega} v$ * above $\rho \hat{\alpha} \varsigma$. When digitizing that, we must find a way to state that: (1) the scribe wrote some text above the line, but not as an addition, since it is clearly a variant of the syntagm below (plural instead of singular). We cannot therefore use the standard way to tag supralinear or interlinear insertions, since it would not make sense. (2) He actually wrote * $\tau \hat{\omega} v^*$ and * $\rho \hat{\omega} v^*$, but meaning $\tau \hat{\omega} v \pi \rho \sigma \sigma \phi \rho \rho \hat{\omega} v$: we must report both readings, since we have to represent what exists on the papyrus but also to make the full combination of words searchable. (3) Since nothing appears deleted, it is not clear if he wanted to correct the text or just juxtapose two different versions of the same passage. There are examples of philological corrections added supra lineam without deletion marks, as well as of deletions indicated with overdots (e.g. P.Oxy. XXIV 2404. l. 2. 6); otherwise, writing a word between dots can be a way to highlight a later correction (e.g. P.Eirene III 25. 1. 3). We cannot be sure of what is going on here because this variant is unattested in the manuscript tradition, in that all Oribasius' passages quoting Herodotus feature the singular form. The P.Tebt. editors speak of «correction or alternative reading» (p. 20, Introduction), M.H. Marganne of «deux variantes»

²⁶ Cf. Reggiani (2018b) 24-26.

²⁷ The Parma project contributed substantially to the definition of a common guideline framework for encoding literary papyri within the DCLP project.

²⁸ Cf. Reggiani (2019) for further details.

and «hésitation».²⁹ If we should define it, we ought to call it a 'scribal variant', but which should we consider as the original reading? The temporary solution I proposed is no more than a trick that exploits the tags intended for editorial corrections and regularizations, with some descriptive comment (see fig. 1). This is clearly a way of describing what is going on and displaying it in a pleasant way, but does not comply with the semantic core of the instance.

P.Oslo inv. 1576 (III CE),³⁰ a fragment of a catechism dealing with tumour-like diseases, partly overlaps with P.Oxy. LXXX 5239 (II-III CE), which is more likely a proper treatise, as may be perceived e.g. from the lack of *eisthesis* in its questions. What is the philological relationship between the two? Does the questionnaire depend on the treatise, or are they two different outcomes of a same ascendant? As far as the extant parallel text is concerned, the wording diverges from each other only for one variant: ὑδροκήλη (P.Oslo, l. 5) vs [ὑ]γροκήλη (P.Oxy., l. 15). The latter is usually considered as a minority variant (LSJ: Poll. IV 203) of the former (cf. Ps.Gal. Def.med. 424 = XIX 447.12-13 K.), but it is attested three times among the medical writers (Orib. Syn.Eust. 3.28.6 and 9 = CMG VI 3. p. 75. 15-16 and 21 Raeder; Steph. In Hp. Progn. Comm. 2.1 = CMG XI 1. 2. p. 140,25 Duffy). Are we facing a trivialization in the Oslo papyrus, or a phonetic variant in the Oxy one, or just two different traditions bearing the same degree of correctness?

As in many other cases, the situation is fluid and difficult to define, and thus to properly represent in a digital edition that should be as critical as possible.³¹ I wonder whether the most effective way to deal with such issues, rather than deploying alternatives or regularizations that relegate one or more parallel versions or variants to the apparatus, or force editors to make whichever choice between a theoretically genuine form and an allegedly deviant version, is to apply a multitext model, which has already been employed to represent and clarify the complex textual tradition of ancient historical fragments, and which seems to be the best way to deal with texts characterized by a high degree of orality and fragmentation.³² A multitext is basically a dynamic collection of multiple critical editions, a network of versions with a single root.

«It produces a representation and visualization of textual transmission completely different from print conventions, where the text that is reconstructed by the editor is separated from the critical apparatus that is printed at the bottom of the page. [... It] allows the reader to have a dynamic visualization of the textual tradition and to perceive the different channels of both the transmission and philological production of the text that is usually hidden in the static, concise, and necessarily selective critical apparatuses of standard printed editions. Producing a multitext, therefore, means producing multiple versions of the same text, which are the representation of the different steps of its transmission and reconstruction, from manuscript variants to philological conjectures».³³

This would also lead us to treat in a more rational way the issue of the linguistic variants, envisaging a set of parallel layers (as currently deployed by the Sematia platform developed by Marja Vierros at Helsinki)³⁴ rather than applying uneasy regularizing patterns.³⁵

²⁹ Marganne (1981a) 320 and (1981b) 76 respectively.

³⁰ Published by Maravela / Leith (2004); a re-edition is forthcoming in P.Oslo IV (I am grateful to Anastasia Maravela for discussing this papyrus with me).

³¹ «The textual tradition of compilations of this sort was highly fluid, and we should not conclude that they represent exactly the same text» (D. Leith, P.Oxy. LXXX 5239).

³² Cf. e.g. Berti (forthcoming).

³³ Berti (forthcoming), 4-5.

³⁴ Cf. Vierros / Henriksson (2017); Vierros (2018).

³⁵ Cf. now further and deeper discussion in Reggiani (2018b) and Stolk (2018).

To conclude, digitizing papyri (especially technical texts, but not only!) helps re-considering the texts and their context, as well as the shape of the databases and the very meaning of a digital edition, which must not be a simple digital transfer of existing paper editions, nor the mere description of an ancient text, but a new tool to enhance our understanding of the past and of our cultural roots, and eventually a new step in the transmission of ancient texts.³⁶ The future of the Digital Corpus of Medical Papyri³⁷ will be precisely to implement new strategies to face all the described challenges.

Bibliography

Andorlini, I. (1993), "L'apporto dei papiri alla conoscenza della scienza medica antica" in ANRW II 37.1, (Berlin-New York) 458-562.

Andorlini, I. (1995), Trattato di medicina su papiro (Firenze).

Andorlini, I. (1997a), "Progetto per il Corpus dei Papiri Greci di Medicina" in Pap.Congr. XXI (Berlin) 17-24 (= Andorlini [2018] vol. 1, 337-343).

Andorlini, I. (2004) (ed.), Testi medici su papiro (Firenze).

Andorlini, I. (2018), Πολλὰ ἰατρῶν ἐςτι τυγγράμματα. Scritti sui papiri e la medicina antica, 2 vols., ed. by N. Reggiani (Firenze).

Ast, R. / Essler, H. (2018), "Anagnosis, Herculaneum, and the Digital Corpus of Literary Papyri" in Reggiani, N. (ed.), Digital Papyrology II: Case Studies on the Digital Edition of Ancient Greek Papyri (Berlin-Boston) 63-73.

Barns, J.W.B. (1949), "Literary Texts from the Fayûm", CQ 43, 1-8.

Berti, M. (forthcoming), "Fragmentary Texts and Digital Libraries" in Crane, G. / Lüdeling, A. / Berti, M. (eds.), Philology in the Age of Corpus and Computational Linguistics (Washington, DC).

Maravela, A. / Leith, D. (2007), "A Medical Catechism on Tumours from the Collection of the Oslo University Library" in Pap.Congr. XXIV (Helsinki) 637-650.

Marganne, M.H. (1981a), Inventaire analytique des papyrus grecs de médecine (Genève).

Marganne, M.H. (1981b), "Un fragment du médecin Hérodote : P. Tebt. II 272" in Pap.Congr. XVI (New York) 73-78.

Marganne, M.H. (1997), L'ophtalmologie dans l'Egypte gréco-romaine d'après les papyrus littéraires grecs (Leiden-Boston-Köln).

Marganne, M.H. (1998), La chirurgie dans l'Egypte gréco-romaine d'après les papyrus littéraires grecs (Leiden-Boston-Köln).

Marganne, M.H. / Mertens, P. (1997), "Medici et Medica. 2e édition (État au 15 janvier 1997 du fichier MP3 pour les papyrus médicaux littéraires)" in Andorlini, I. (ed.), 'Specimina' per il Corpus dei papiri greci di medicina (Firenze) 3-71.

Nieddu, G.F. (1992), "Il ginnasio e la scuola: scrittura e mimesi del parlato" in Cambiano, G. / Canfora, L. / Lanza, D. (eds.), Lo spazio letterario della Grecia antica, I.1 (Roma) 555-585.

Nutton, V. (1972), "Galen and Medical Autobiography", PCPS 18, 50-62.

Nutton, V. (1990), "The Patient's Choice: A New Treatise by Galen", CQ 40, 236-257.

Reggiani, N. (2016), "Catechism", in Medicalia Online,

http://www.papirologia.unipr.it/CPGM/medicalia/vocab/index.php?tema=8.

Reggiani, N. (2017a), Digital Papyrology I: Methods, Tools and Trends (Berlin-Boston).

Reggiani, N. (2017b), Isabella Andorlini (28 aprile 1955-11 novembre 2016), Aegyptus 96 (2016 [2017]) 143-165.

Reggiani, N. (2018a), "Isabella Andorlini e la papirologia medica" in Reggiani, N. (ed.), Papiri, medicina antica e cultura materiale. Contributi in ricordo di Isabella Andorlini (Parma).

Reggiani, N. (2018b), "The Corpus of the Greek Medical Papyri Online and a New Concept of Digital Critical Edition" in Reggiani, N. (ed.), Digital Papyrology II: Case Studies on the Digital Edition of Ancient Greek Papyri (Berlin-Boston) 1-59.

Reggiani, N. (2019), "Linguistic and Philological Variants in the Papyri: A Reconsideration in Light of the Digitization of the Greek Medical Papyri" in Reggiani, N. (ed.), Greek Medical Papyri: Text, Context, Hypertext. Proceedings of the Final DIGMEDTEX Conference (Berlin-Boston) 237-256.

³⁷ Work is never completely done: some very complex and very recently published medical papyri, such as the *Anonymus Londinensis* and most of the P.Oxy. LXXX texts, have been excluded for practical reasons from the DIGMEDTEXT project, but will certainly encoded in the near future.

³⁶ Cf. Reggiani (2018b), (forthcoming c) and (forthcoming e).

- Reggiani, N. (forthcoming a), "Ancient Doctor's Literacies and the Digital Edition of Papyri of Medical Content", Classics@ 15.
- Reggiani, N. (forthcoming b), "I papiri greci di medicina come fonti storiche: il caso dei rapporti dei medici pubblici nell'Egitto greco-romano", Aegyptus.
- Reggiani, N. (forthcoming c), "Transmission of Recipes and Receptaria in Greek Medical Writings on Papyrus Between Ancient Text Production and Modern Digital Representation" in «Cupis volitare per auras»: Book, Libraries and Textual Transmission from the Ancient to the Medieval World (Bari).
- Reggiani, N. (forthcoming d), "Digitizing Medical Papyri in Question-and-Answer Format" in Gielen, E. / Meeusen, M. (eds.), Ancient Medicine in Questions and Answers (Leiden-Boston).
- Reggiani, N. (forthcoming e), "The Digital Edition of Ancient Sources as a Further Step in the Textual Transmission" in Novokhatko, A. / Maier, F. / Chronopoulos, S. (eds.), Digital Classics III: Re-thinking Text Analysis. Proceedings of the Workshop, Heidelberg, May 11-13, 2017 (Berlin-Boston).
- Savignago, L. (2008), Eisthesis. Il sistema dei margini nei papiri dei poeti tragici (Alessandria).
- Stolk, J.V. (2018), "Encoding Linguistic Variation in Greek Documentary Papyri. The Past, Present and Future of Editorial Regularization" in Reggiani, N. (ed.), Digital Papyrology II: Case Studies on the Digital Edition of Ancient Greek Papyri (Berlin-Boston) 119-137.
- Vierros, M. (2018), "Linguistic Annotation of the Digital Papyrological Corpus: *Sematia*" in Reggiani, N. (ed.), Digital Papyrology II: Case Studies on the Digital Edition of Ancient Greek Papyri (Berlin-Boston) 105-118.
- Vierros, M. / Henriksson, E. (2017), "Preprocessing Greek Papyri for Linguistic Annotation" in Büchler, M. / Mellerin, L. (eds.), Computer-Aided Processing of Intertextuality in Ancient Languages (Journal of Data Mining and Digital Humanities, special issue), URL: https://jdmdh.episciences.org/paper/view/id/1385.

Plates

LEIDEN+

5.- [ov]ς αιτίαι|ed| πλεῖ5.- [σ]ται <αι>τίαι:> <:της προσφορας=actual text|ed|*dot*των*dot*<:προσφορων|reg|*dot*ρων*dot*:>=scribal original insertion above line:> εἰσιν:

XML

HTML

5[ου]ς αἰτίαι(*) τῆς προσφορᾶς(*) εἰσιν

App.

 5 . actual text : ((dot)) $_{\overline{\text{tov}}}$ ((dot)) ((dot)) $_{\overline{\text{pov}}}$ ((dot)) (l. $_{\overline{\text{poσφορῶν}}}$) scribal original insertion above line

Fig. 1

no.	Papyrus edition	TM No.	Editor	Status
l	GMP II 10	130027	Reggiani N.	ready for DCLP, no XML
!	O.Bodl. II 2181	63911	Angolani E., Reggiani N.	added to DCLP
	O.Bodl. II 2188v	64505	Saccani G., Bonati I.	added to DCLP
	PSI XV 1510	64024	Reggiani N.	added to DCLP
	P.Harr. I 47	63227	Brunazzi A., Iori L.	added to DCLP
	GMP II 14 = PSI III 252	63804	Bertonazzi F., Centenari M.	added to DCLP
	GMP 15	69006	Bonati I.	added to DCLP
	GMP I 6	69007	Bonati I.	added to DCLP
	GMP I 5 = P.Tebt. II 273	63789	Jori L.	added to DCLP
0	GMP II 4	69145	Centenari M.	added to DCLP
ı	GMP 17	63707	Bernini A.	added to DCLP
2	PSI inv. 3054 = Andorlini (1995) + P.Carlsberg s.n. + P.Lund I 6 + P.Mil. Vogl. I 16 + P.Tebt. II 677 + GMP II 1 + P.Tebt. II 681+ P.Tebt. Suppl. I 017 + add.	59149	Reggiani N.	revising
3	SB XXVIII 17139 = Andorlini (2004) 181-5	69032	Iori L.	added to DCLP
4	Andorlini (2004) 63-77	69028	Bonati I.	added to DCLP
5	P.Oxy. LXXIV 4978	119323	Centenari M.	added to DCLP
6	P.Lond.Lit. 170 + SB XVI 12529	63839	Iori L.	added to DCLP
7	P.Oxy. LXXIV 4979	119324	Centenari M.	added to DCLP
8	SB XXVI 16458 = PSI VI 718	64564	Reggiani N.	added to DCLP
9	O.Bodl. II 2183	64502	Brunazzi A., Iori L.	added to DCLP
0	O.Bodl. II 2184	64507	Brunazzi A., Iori L., Centenari M.	added to DCLP
1	GMP II 2 = P.Tebt. II 678 descr.	63409	Bernini A.	added to DCLP
2	GMP II 3	118692	Bernini A.	added to DCLP
3	P.Tebt.Tait 43	63282	Bernini A., Iori, L.	added to DCLP
4	P.Tebt.Tait 44	63283	Bernini A., Iori, L.	added to DCLP
5	P.Oxy. LXXIV 4970	119315	Bernini A.	added to DCLP
6	P.Oxy. LXXIV 4972	119317	Bernini A., Iori, L.	added to DCLP
7	P.Oxy. LXXIV 4973	119318	Bernini A.	added to DCLP
8	Marganne (1998) no. 5	63819	Bertonazzi F.	added to DCLP
9	GMP I 9 = BKT IX 81	59959	Rivera L.	added to DCLP
0	GMP I 13	63019	Damiani V.	added to DCLP
1	GMP I 15	64533	Corazza F.	added to DCLP
2	GMP I 8 = BKT IX 80v	63765	Nicolardi F.	added to DCLP
3	GMP I 12	64013	Canzio N.	added to DCLP
4		63332	Bertonazzi F.	added to DCLP
5	P.Aberd. 11	63569	Bertonazzi F. Bertonazzi F.	added to DCLP
_	P.Ross.Georg. I 20			
7	Marganne (1998) no. 4	59968 65646	Bertonazzi F. Mauriello M.	added to DCLP
7	GMP I 10			added to DCLP
8	GMP I 4 + P.Ross.Georg, I 19	62722	Cattaneo G., Reggiani N.	added to DCLP
9	GMP I 11 = P.Giss.Univ. IV 45	65526 59118	Bertonazzi F. Rivera L.	added to DCLP
_	GMP II 12 = P.Oxy. LIV 3724			
2	GMP II 11 = P.Eleph.Wagner 4	67945	Bertonazzi F.	added to DCLP
	GMP II 15	64216	Nicolardi F.	added to DCLP
3	P.Iand. V 85r	63248	Blanco M.	submitted to ParmaMed
4	O.Bodl. II 2186	64504	Saccani G., Bonati I.	revising
5	O.Bodl. II 2187	64214	Saccani G., Bonati I.	revising
6	P.Harr. I 46	63077	Saccani G., Bonati I.	revising
7	P.Oxy. LXXIV 4974	119319	Bernini A., Iori, L.	added to DCLP
8	O.Bodl. II 2182 = SB XIV 11708	63912	n.d.	revising
9	GMP II 13 = P.Tebt. II 676 descr.	63408	Canzio N.	revising
0	P.Oxy. LXXIV 4971	119316	Damiani V., Bernini A.	revising
1	GMP II 7	118694	n.d.	added to DCLP

Fig. 2

52	P.Giss.Univ. IV 44	65655	n.d.	added to DCLP
53	GMP II 6	118693	Corazza F.	added to DCLP
54	SB XIV 12074	65756	Bernier A., Centenari M.	added to DCLP
55	SB XIV 12141	63940	Blanco M., Centenari M.	added to DCLP
56	P.Yale II 133	64260	Bernier A., Centenari M.	added to DCLP
57			Iori L.	
	O.Bodl. II 2185 = SB XIV 11709	64503		added to DCLP
58	MPER XIII 17	107412	Iori L.	ready for DCLP, no XML
59	MPER XIII 18	107413	lori L.	ready for DCLP, no XML
60	O.Leid. 2	63311	Iori L.	added to DCLP
61	P.Lond.Lit. 171	64091	Iori L.	added to DCLP
62	P.Oxy. LXXIV 4975	119320	Iori L.	added to DCLP
63	P.Oxy. LXXIV 4977	119322	Iori L.	added to DCLP
64	P.Oxy. 11 1384	62077	Iori L.	added to DCLP
65	P.Oxy. XVI 1922	35604	lori L.	ready for DCLP, no XML
66	P.Hib. II 191	65740	Iori L.	added to DCLP
67	P.Hib. II 192	65741	Iori L.	added to DCLP
68	P.Lond.Lit. 167	65574	lori L.	added to DCLP
69	P.Oxy. LXXIV 4976	119321	Iori L.	added to DCLP
70	P.Oxy. VIII 1088	63118	Iori L.	added to DCLP
71	P.Aberd. 125v	64262	Giacchi S.L., Iori L., Reggiani N.	revising
72	PSI Congr. XVII 19	64725	Iori L.	added to DCLP
73	PSI IV 297a+b	64720	lori L.	added to DCLP
74	SB XXVI 16458 = PSI VI 718	64564	Iori L.	added to DCLP
75	P.Oxy. III 468	64017	Iori L.	added to DCLP
76	MPER XIII 5	64353	Centenari M.	added to DCLP
77	MPER XIII 7	64525	Centenari M.	added to DCLP
78	MPER XIII 9	64795	Centenari M.	added to DCLP
79	MPER XIII 13	107410	Centenari M.	ready for DCLP, no XML
80	MPER XIII 14	65377	Centenari M.	added to DCLP
81	O.Leid. 1	65613	Centenari M.	added to DCLP
82	SB XVI 13080	63958	Centenari M.	added to DCLP
83	SB XIV 11977	34810	Centenari M.	added to DCLP
84	SB XIV 12175	63575	Centenari M.	added to DCLP
85	P.Grenf. I 52 = SB XVI 12329	64213	Centenari M.	added to DCLP
86	P.Haun. III 47r = SB XVIII 13310	63504	Centenari M.	added to DCLP
87	P.Coll.Youtie II 87r = SB XIV 12142	65064	Mauriello M.	added to DCLP
88	P.Genova I 15 = SB X 10753	63477	Centenari M.	added to DCLP
89	P.Prag. I 88	35825	Bertonazzi F.	ready for DCLP, no XML
90	P.Prag. I 89v	32297	Bertonazzi F., Monte A.	ready for DCLP, no XML
91	MPER XIII 3 = SB XVI 13045	26761	Centenari M.	added to DCLP
92	P.Laur. IV 151	63816	Nicolardi F.	added to DCLP
93	P.Mert. I 12	21292	Centenari M.	ready for DCLP, no XML
94	MPER XIII 16	65378	Monte A.	added to DCLP
95	MPER XIII 1 = P.Vind.Worp 20	63930	Monte A.	added to DCLP
96	MPER XIII 4 = SB XVI 13002 = SPP XX 27	64242	Corazza F.	added to DCLP
97	P.Oxy. II 234 + LII 3654	59150	Reggiani N.	added to DCLP
98	P.Harr. I 98	64388	Monte A.	added to DCLP
99	PSI Congr. XX 5	64041	Centenari M.	added to DCLP
100	MPER XIII 6	107414	Centenari M.	
101	GMP I 3 = P.Lond.Lit. 169	59960	Iori L., Conti M.	added to DCLP
102	MPER XIII 22 = MPER III 59	65141	Iori L., Guareschi M.	added to DCLP
103	MPER XIII 10	64801	Centenari M.	added to DCLP
104	MPER XIII 12	65276	Centenari M.	revising
105	P.Cair.Masp. II 67141r. 2. 20-29	65004	Centenari M., Giacchi S.	added to DCLP
	·			1

Fig. 3

100			la	III I DOTE
106	P.Iand. V 86r = SB XXVIII 17142	64057	Centenari M.	added to DCLP
107	SB XIV 11964	64889	Centenari M.	added to DCLP
108	P.Ross.Georg. V 52	63711	Centenari M.	added to DCLP
109	P.Ross.Georg. V 57	64224	Centenari M.	added to DCLP
110	P.Aberd. 123	63952	Iori L., Haji Mohamed S.	added to DCLP
111	BKT III pp. 22-26	63072	Bertonazzi F.	added to DCLP
112	MPER XIII 20 = MPER III 57	64524	Bertonazzi F.	added to DCLP
113	P.Ant. III 126	65233	Bertonazzi F.	added to DCLP
114	P.FuadUniv. 1	59969	Bertonazzi F.	added to DCLP
115	P.Lond.Lit. 166 + P.Cair.Mich. II 10	59973	Bertonazzi F.	added to DCLP
116	P.Münch. II 23	59971	Bertonazzi F.	added to DCLP
117	P.Ryl. III 529	59970	Bertonazzi F.	added to DCLP
118	P.Ryl III 531	60196	Iori L., De Gianni A.	added to DCLP
119	BKT III pp. 5-9v	60180	Centenari M., Gaetano D.	added to DCLP
120	BKT IX 38 = BKT III p. 9 + P.Berol. inv.21137	60179	Centenari M., Nava B.	added to DCLP
121	BKT IX 50	63367	Centenari M., Haji Mohamed S.	added to DCLP
122	GMP I 2	59697	Moser M.	added to DCLP
123	P.Aberd. 8r	59696	Iori L., Centenari M., Nava B.	added to DCLP
124	P.Ant. I 28	60189	Corazza F.	added to DCLP
125	P.Ant. II 86	60193	Corazza F.	added to DCLP
126	P.Ant. III 183	60191	Corazza F.	added to DCLP
127	P.Ant. III 184 (frr. 1-10)	60192	Corazza F.	added to DCLP
128	P.Ant. III 185	60190	Corazza F.	added to DCLP
129	CPF III 3 (pp. 19-38)	59962	Centenari M., Nava B.	added to DCLP
130	P.Berl.Möller 13r	64268	Corazza F.	added to DCLP
131	P.Bingen 1 = P.Tebt. III 897	60195	Iori L., Nava B., Quartarone C.	added to DCLP
132	P.Brook. 94	60177	Centenari M., Nava B.	added to DCLP
133	P.Dub. 1	60176	Napolitano S., Iori L.	added to DCLP
134	Andorlini (1997) 117-140	60194	Iori L., Haji Mohamed S.	added to DCLP
135	P.Fay. 204v	60181	Moser M.	added to DCLP
136	P.Flor. II 115	59957	Iori L., Centenari M., Breviglieri E.I., Spedicato E.	revising
137	P.Köln I 19r	60186	Centenari M., Giacchi S.	added to DCLP
138	P.Oxy. XIX 2221r + P.Köln V 206r	61916	Reggiani N.	added to DCLP
139	P.Köln IX 356	68614	Centenari M., Guareschi M.	added to DCLP
140	CPF I.2.1 18. 6 (pp. 107-109)	60188	Iori L., Centenari M.	added to DCLP
141	P.Mil.Vogl. II 45 + VI 262r	61915	Iori L., Centenari M., Haji Mohamed S.	added to DCLP
142	BKT IX 42 = P.Münch. II 43 + PBerol. Inv. 21141	59958	Iori L., Centenari M., Conti M.	added to DCLP
143	P.Oxy. IX 1184	60175	Moser M.	added to DCLP
144	P.Oxy. XXXI 2547v	60173	Moser M.	added to DCLP
145	P.Oxy. LVI 3851	61917	Moser M.	added to DCLP
146	P.Oxy. LXXIV 4969	119314	Centenari M., Conti M.	added to DCLP
147	P.Ryl. I 56v	60178	Iori L., Centenari M., Nava B.	added to DCLP
148	P.Ross.Georg. I 22	64223	Reggiani N.	added to DCLP
149	PSI II 116r	60185	Iori L, Haji Mohamed S.	added to DCLP
150	PSI II 117	62777	Iori L., Centenari M., Conti M.	added to DCLP
151	P.Tebt. II 272v	60048	Iori L., Quartarone C.	added to DCLP
152	P.Vars. 5v	64236	Reggiani N.	added to DCLP
153	BKT III pp. 19-21 r	63071	Corazza F.	added to DCLP
154	BKT III pp. 19-21 r	63983	Corazza F.	added to DCLP
155	BKT X 21	154377	Corazza F.	added to DCLP
156			Corazza F.	added to DCLP
156	BKT X 22	154371	Corazza F.	
	BKT X 23	154385		added to DCLP
158	BKT X 24	63770	Corazza F.	added to DCLP

Fig. 4

4.50			In	III. Park
159	MPER XIII 19 = MPER I 32	63723	Reggiani N.	added to DCLP
160	P.Aberd. 9r	63213	Iori L., De Gianni A.	added to DCLP
161	P.Aberd. 124r = GMP I 1	63334	Iori L., Centenari M., Giacchi S.	added to DCLP
162	P.Ant. III 123	65077	Corazza F.	added to DCLP
163	P.Ant. III 124	65075	Corazza F.	added to DCLP
164	P.Ant. III 125	65076	Corazza F.	added to DCLP
165	P.Ant. III 127	65340	Corazza F.	added to DCLP
166	P.Ant. III 128	65074	Corazza F.	added to DCLP
167	P.Ant. III 129	64139	Corazza F.	added to DCLP
168	P.Ant. III 131	65072	Corazza F.	added to DCLP
169	P.Ant. III 133	64330	Corazza F.	added to DCLP
170	P.Ant. III 136	65073	Corazza F.	added to DCLP
171	Marganne (1994) 97-103	65632	Iori L., Conti M.	added to DCLP
172	Barns (1949) no. 3	65633	Reggiani N.	added to DCLP
173	P.Berol. inv. 21350	63025	Iori L., Centenari M., Conti M.	added to DCLP
174	P.Cair.Goodsp. 2	63402	Iori L., Haji Mohamed S.	added to DCLP
175	P.Erl. 12r	64018	Iori L., Giacchi S.	added to DCLP
	P.Grenf. II 7b + P.Ryl. I 39 + P.Heid. inv. 401 + P.Hib. II			
176	190	65755	Centenari M., Foti C., Marazzini F.	revising
177	P.Hamb. II 140	65776	Moser M.	revising
178	P.Harr. I 26v	63993	Iori L., Haji Mohamed S.	added to DCLP
179	P.Iand. V 82 = Andorlini (2004) 237-250	65528	Moser M.	added to DCLP
180	P.Johnson + P.Ant. III 214	64598	Reggiani N.	added to DCLP
181	P.Köln VIII 327	59762	Centenari M., Haji Mohamed S.	added to DCLP
182	P.Köln VIII 337	63495	Corazza F.	added to DCLP
183	P.Laur. inv. PL 68	64728	Centenari M., Conti M.	added to DCLP
184	P.PisaLit. 6	63748	Reggiani N.	added to DCLP
185	Andorlini (2004) 29-62	69027	Centenari M., Giacchi S.	added to DCLP
186	P.Lund I 7	64316	Reggiani N.	added to DCLP
187	P.Med. I 18r	63561	Iori L., Haji Mohamed S.	added to DCLP
188	P.Mich. XVIII 766	64325	Iori L., Nava B.	added to DCLP
189	P.Mil.Vogl. I 14r	65539	Iori L.	added to DCLP
190	P.Mil.Vogl. I 15 + P.Oxy. LXXX 5235	64473	Reggiani N.	added to DCLP
191	P.Münch. II 24r	63131	Centenari M., Guareschi M.	added to DCLP
192	P.Münch. II 25r	63572	Centenari M., Nava B.	added to DCLP
193	P.Oslo III 72	63583	Moser M.	added to DCLP
194	P.Oxy. III 437	60184	Moser M.	added to DCLP
195	P.Oxy. LIII 3701	62721	Moser M.	added to DCLP
196	P.Oxy LXXIV 4973	119318	Centenari M., Nava B.	added to DCLP
197	P.Princ. III 114v	63189	Iori L., Nava B., Quartarone C.	added to DCLP
198	P.Rain. III 61	64936	Centenari M.	added to DCLP
199	P.Ryl. III 530	64105	Moser M.	added to DCLP
200	PSI II 132v	63457	Iori, L. Guareschi M.	added to DCLP
201	PSI XII 1275v	63401	Iori L., Marazzini F., Spedicato E.	added to DCLP
202	Andorlini (1997) 153-168	63244	Reggiani N.	added to DCLP
203	PSI inv. 3011r	64026	Iori L., Guareschi M.	added to DCLP
204	Kalblfleisch, P. Argentoratenses Gr., pp. 8-12	59052	Centenari M., Guareschi M.	added to DCLP
205	Fausti, SCO 41 (1991) 343-351	63708	Centenari M., Haji Mohamed S.	added to DCLP
206	P.Tebt. II 679 + P.Tebt.Tait 39-41	63596	Reggiani N.	added to DCLP
207	P.Turner 14r	63560	Reggiani N.	added to DCLP
208	P.Genova II 51v	63098	Iori L., Baccaro C.	added to DCLP
209	BGU III 953	31247	Corazza F.	ready for DCLP, no XML
210	BGU XVI 2619	23343	Corazza F.	ready for DCLP, no XML
211	BKT III pp. 30-31	63383	Corazza F.	added to DCLP
212	BKT III pp. 32-33	64855	Corazza F.	added to DCLP
	2111 111 Ph. 22 00	1 - 1000		1 111111 10 15 111

Fig. 5

212	DVM VV EC OD VVV 4 4504	64075	Lo p	II I. DOID
213	BKT IX 76 = SB XX 14501	64975	Corazza F.	added to DCLP
214	BKT IX 176	64848	Corazza F.	added to DCLP
215	BKT X 25	154384 69008	Corazza F.	ready for DCLP, no XML
216	GMP I 14 = P.Sijp. 6		Reggiani N.	added to DCLP
217	GMP II 8	118695	Corazza F.	added to DCLP
218	GMP II 9			added to DCLP
219	MPER XIII 8	64793	Iori L., Conti M.	added to DCLP
220	MPER XIII 21	64796	lori L.	added to DCLP
221	O.Mon.Epiph. 622	65226	Reggiani N.	added to DCLP
222	O.Stras. I 619	63705	Corazza F.	added to DCLP
223	P.Aberd. 10	63333	Reggiani N.	added to DCLP
224	P.Ant. II 64	65082	Corazza F.	added to DCLP
225	P.Ant. II 66	64757	Corazza F.	added to DCLP
226	P.Ant. III 130	65078	Corazza F.	added to DCLP
227	P.Ant. III 132	65079	Corazza F.	added to DCLP
228	P.Ant. III 134	64482	Corazza F.	added to DCLP
229	P.Ant. III 135	65080	Corazza F.	added to DCLP
230	P.Ant. III 137	64900	Corazza F.	added to DCLP
231	P.Ant. III 138	63874	Corazza F.	added to DCLP
232	P.Ant. III 186+139(?)	59961	Corazza F.	added to DCLP
233	P.Ant. III 140	64896	Corazza F.	added to DCLP
234	SB VIII 9860	65669	Reggiani N.	added to DCLP
235	P.Brook, 94r	60177	Moser M.	added to DCLP
236	P.Coll.Youtie I 4 v	64118	Reggiani N.	added to DCLP
237	P.Coll.Youtie II 86	31382	Reggiani N.	ready for DCLP, no XML
238	P.Fay.Coles 3	65782	Moser M.	added to DCLP
239	P.Fay.Coles 8	63592	Reggiani N.	added to DCLP
240	P.Flor. II 117r	63091	Iori L., Foti C., Gaetano D.	added to DCLP
241	P.Freib. IV 48r	63818	Centenari M., Guareschi M.	added to DCLP
242	SB XXIV 15917	63493	Centenari M., Guareschi M.	revising
243	P.Horak 14	68982	Iori L., Conti M.	ready for DCLP, no XML
244	P.Kell. I 89	64439	Reggiani N.	added to DCLP
245	P.Köln VII 291	63261	Corazza F.	added to DCLP
246	P.Köln VII 292	64077	Corazza F.	added to DCLP
247	P.Köln VII 293	63500	Corazza F.	added to DCLP
248	P.Köln VII 311v + P.Oxy. LXXX 5221	60182	Corazza F.	added to DCLP
249	P.Köln VII 312	59695	Corazza F.	added to DCLP
250	P.Scholl 13-15	143319	Reggiani N.	added to DCLP
251	P.Chic. 4	63793	Reggiani N.	added to DCLP
252	Fausti, Annali Siena 9 (1988) 227-232	63129	Iori L., Foti C., Gaetano D.	added to DCLP
253	SB XX 14502	35751	Iori L., Conti M.	ready for DCLP, no XML
254	P.Münch. II 26r	63571	Moser M.	added to DCLP
255	P.Murabba'ât 112	63324	Reggiani N.	added to DCLP
256	P.NYU II 28 = SB X 10492	26899	Reggiani N.	added to DCLP
257	P.Paramone 3	68991	Corazza F.	added to DCLP
258	P.Princ. III 155	63920	Reggiani N.	added to DCLP
259	P.Ryl. I 21v + BKT III p. 10 + P.Rein. I 2v	65562	Reggiani N.	added to DCLP
260	PSI X 1180r	63458	Iori L., Quartarone C.	revising
261	PSI Congr. XXI 3	65525	Iori L., Guareschi M.	added to DCLP
262	P.Ryl. I 29	64106	Iori L., Giacchi S.	added to DCLP
263	P.Strasb. inv. gr. 90 + P.Ryl. I 29a + P.Ryl. I 29b	63709	Iori L., Giacchi S.	revising
264	P.Wash.Univ. II 67r	63306	Moser M.	added to DCLP
265	P.Yale II 123r	65770	Iori L., Conti M.	added to DCLP
266	SB XIV 11909 = P.Yale II 134 = Suppl.Mag. II 76	64529	Reggiani N.	added to DCLP

Fig. 6

267	SB XXVIII 17135	69029	Iori L., Conti M., Riccò V.	added to DCLP
268	SB XXVIII 17136	69030	Iori L., Conti M., Riccò V.	added to DCLP
269	SB XXVIII 17137	69031	Iori L., Conti M.	added to DCLP
270	SB XXVIII 17138	69033	Iori L., Guareschi M.	added to DCLP
271	SB XXVIII 17140	64766	Iori L., Marazzini F., Spedicato E.	added to DCLP
272	SB XXVIII 17141	69034	Iori L., Haji Mohamed S., Guareschi M.	added to DCLP
273	PSI IV 297a	35216	Iori L.	added to DCLP
274	P.Mich. XVII 758	59332	Bertonazzi F., Corazza F., Rizzardi L., Galaverna M.E., Bottioni C., Catania M., Giraldi F., Lillo P., Saccani G., Mazzetti E., Mazzolari L., Brunazzi A., Angolani E., Pajares Collado N., Ferrari C.M., Iori L., Centenari M., Reggiani N., Bonati I.	added to DCLP
275	Maravela / Leith (2004)	68976	Reggiani N.	ready for DCLP after final revision
276	P.Oxy. LXXX 5236	388542	Andorlini I.	ready for DCLP, no XML
277	P.Oxy. LXXX 5239	388545	Andorlini I.	revising
278	P.Bagnall 1	142503	Andorlini I., Reggiani N.	added to DCLP
279	P.Tebt.Tait 42	63591	Reggiani N.	added to DCLP
280	P.Prag. III 249	130574	Reggiani N.	added to DCLP
281	P.Ant. III 184 (fr. 11)	NO	Reggiani N.	ready for DCLP, no TM number (the fragment does not belong to TM 60192 = no. 127 above, and has been encoded separately).